DOCUMENT RESUME

ED 344 633 JC 920 199

TITLE	Critical Success Factors for the North Carolina Community College System, 1992. Third Annual Report.
INSTITUTION	North Carolina State Dept. of Community Colleges. Div. of Planning and Research Services.
PUB DATE	Apr 92
NOTE	108p.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Access to Education; Accountability; Articulation (Education); *College Role; Community Colleges; Economic Development; *Educational Assessment; *Educational Quality; Labor Force Development; *Organizational Effectiveness; School Community Relationship; *State Standards; State Surveys; *Success; Tables (Data); Two Year Colleges
IDENTIFIERS	*North Carolina Community College System

ABSTRACT

In September 1991, the State Board of Community Colleges of North Carolina revised this report on the critical success factors for the state's community college system. The six factors examined in the report are quality, access, education continuum, workforce development, community services, and program management and accountability. The report begins with a description of the development and utilization of the success factors. For each success factor, a series of measures are analyzed which comprise their key elements. For example, for the quality success factor, the nine specific measures analyzed are: (1) institutional salaries as a percent of the Southeastern regional average; (2) participation in staff development programs; (3) persistence of students toward completion of goals; (4) number of students returning from previous quarters; (5) rate of success on licensure exams; (6) correctness of equipment; (7) percent of libraries meeting the American College and Research Library Standards; (8) number of students moving from one level of literacy to another; and (9) performance of transfers after two semesters. Data for the system as a whole and, where appropriate, for individual institutions, are presented for each measure, along with background information, a brief analysis of implications, and sources and recommendations for future data collection. (JMC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED344633

1992 *CRITICAL SUCCESS FACTORS*

FOR THE

NORTH CAROLINA COMMUNITY COLLEGE SYSTEM

Third Annual Report

North Carolina Department of Community Colleges

April 1992

JC920199

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

B. Fountain

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it

☒ Minor changes have been made to improve reproduction quality

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

1992 *CRITICAL SUCCESS FACTORS*

FOR THE

NORTH CAROLINA COMMUNITY COLLEGE SYSTEM

Third Annual Report

April 1992

Published by

North Carolina Department of Community Colleges
Planning & Research Section
Keith Brown, Project Director

Kathryn Baker Smith
Associate Vice President for Planning & Research

Dr. Sylvester McKay
Director of Research

Keith Brown
Coordinator of Institutional Planning

Paul Nagy
Coordinator of Special Projects

Brenda Splawn
Desktop Publisher

CRITICAL SUCCESS FACTORS FOR THE NORTH CAROLINA COMMUNITY COLLEGE SYSTEM

Third Annual Report
April, 1992

This is a report on the critical success factors for the North Carolina Community College System as revised by the State Board of Community College in September, 1991. This is the third annual report. Data have been collected from existing sources and reported where possible for the previous five years. The report contains data for the system as a whole and for individual institutions where appropriate.

The report begins with a description of the development and uses of the factors. The data are presented for each measure, along with background information, brief analysis of implications, sources and recommendations for future data collection. The report concludes with some general recommendations. It should be noted that except for the brief analysis, conclusions are not drawn from the data as part of this document. This report, like previous reports, will be further studied by the State Board of Community Colleges to determine what actions should be taken in terms of setting priorities for improvement.

In response to requests from the State Board of Community Colleges and the legislature, institutional data on selected measures are included in the report. Whereas the critical success factors measures were developed to measure the performance of the system, some measures are reflective of the effectiveness of the individual colleges.

As with the data on system level measures, conclusions on the perfomance of individual institutions are not drawn from the data as part of this report. In presenting the institutional data, the colleges have been grouped by size, as indicated by full time equivalent students (FTE), and listed within each group in FTE order. The colleges have not been ranked by performance due to the differences in the nature of the colleges and the quality of the data currently being collected.

Like previous experiences with collection of data on the critical success factors, the process of compiling this report has revealed that there is still considerable room for improving the measures, and the System Planning Committee will continue that process. The capacity of the system to gather and analyze data on its own operations is not adequate and needs to be improved.

CRITICAL SUCCESS FACTORS INDEX

PAGE

INTRODUCTION i

BACKGROUND 1

CRITICAL SUCCESS FACTORS AND MEASURES 4

FUTURE PROSPECTS 5

FACTOR I: QUALITY 7

FACTOR II: ACCESS 43

FACTOR III: EDUCATION CONTINUUM 63

FACTOR IV: WORKFORCE DEVELOPMENT 75

FACTOR V: COMMUNITY SERVICES 83

FACTOR VI: PROGRAM MANAGEMENT/ACCOUNTABILITY 97

CRITICAL SUCCESS FACTORS
BACKGROUND AND DEVELOPMENT

Critical success factors have been defined as "the key things that must go right for an enterprise (in this case, the North Carolina Community College System) to flourish and achieve its goals." The concept of critical success factors was developed at the Massachusetts Institute of Technology Sloan School of Business for application in a business setting, but it is applicable to any organization. The effort to identify these "key things" enables the organization to focus its efforts. Thinking through appropriate measures for the factors insures that the organization will examine its performance. Thus, critical success factors are both a planning and an evaluation/accountability tool.

USES FOR CRITICAL SUCCESS FACTORS

- **Accountability**
- **Development of Strategic Goals**
- **Improvement of Programs and Administration**

Measurements of the attainment of critical success factors are an important part of the accountability system in use in the Community College System. A number of tools are in place and in use by the State Board. The colleges are required to conduct a planning process which includes goal-setting and evaluation of progress toward those goals. Other accountability mechanisms include curriculum standards, review of institutional plans and programs, program and financial audits, program monitoring and accreditation. Other tools are being developed, including the student progress monitoring system (which will also support development of better critical success factors).

In its 1989 session, the North Carolina General Assembly adopted a provision (S.L.1989; C. 752; S. 80) which mandated that:

> "The State Board of Community Colleges shall develop a 'Critical Success Factors' list to define statewide measures of accountability for all community colleges. Each college shall develop an institutional effectiveness plan, tailored to the specific mission of the college. This plan shall be consistent with the Southern Association of Colleges and Schools criteria and provide for collection of data as required by the 'Critical Success Factors' list."

The colleges, in turn, were granted a greater degree of flexibility in deciding how to use their state funds.

This special provision is neither the first nor the last state initiative linking flexibility in the use of funds with required accountability measures. Its requirements leave in the hands of the State Board and the colleges the identification of the key factors that will be measured and the specific approach that will be taken to measure them. The measurement of these factors provides a way of showing how well the system is doing its job as assigned by law and how well the system is addressing the goals set by the State Board of Community Colleges.

The critical success factors were developed by the State Board to measure the system, not individual colleges. The state totals and averages do provide a benchmark for the colleges to measure their efforts and institutional data on selected measures is presented in this report. Still, the critical success factors compiled for assessing the performance of the system will not be exactly suitable for measurement of any institution. For example, the percent of students in the University of North Carolina system who attended a community college is a measure that helps system leaders evaluate our system's progress over time and compare our system with others, but it cannot be meaningfully calculated for individual institutions. Especially in these times when budgets are very tight, the performance of individual colleges on measures such as currentness of equipment and meeting Association of College and Research Libraries standards may reflect the results of hard choices made by individual administrators, and not be inherently any better than the choice made by another institution.

Some measures are so important to any real attempt to assess success that their absence compromises the result. Yet, some of these measures are not possible within the present capacity of the system to measure. In the initial year, a commitment was made that since resources for data collection at the campus level are already strained, no measures requiring additional surveys or data collection at the college level would be selected. This year we have surveyed the colleges for a small amount of new data, and we have made some improvements in the collection of data at the state level which enable us to provide new and more in-depth information on some factors.

There remain some measures which are essential to a meaningful report, yet are beyond our capacity. The most essential of these is persistence of students toward goals, which is a key component of the Student Progress Monitoring System currently being developed. The System Planning Committee is continuing to examine the relevance of the measures and the adequacy of the data.

This report includes background information explaining why each measure was chosen, what it is intended to show and the limitations of the data. The data and sources of the data, a brief assessment of the implications of the data and recommendations for future changes in the measures are given. Where appropriate, institutional data are presented on selected measures. Recommendations for program changes indicated by the data are outside the scope of this report.

The critical success factors were originally adopted by the State Board of Community Colleges in July, 1989 and amended first in September, 1990 and again in September, 1991. North Carolina has adopted the matrix format of the National Alliance of Community and Technical Colleges to graphically display the set of factors chosen. Figure One is a matrix showing the factors and measures.

8

CRITICAL SUCCESS FACTORS AND MEASURES, 1991-92

FACTOR I. Quality	A. Institutional salaries as a percent of the Southeastern regional average	B. Participation in staff development programs: Tier A	C. Persistence of students towards completion of goals- (literacy students only)	D. Number of students returning from previous quarters	E. Rate of success on licensure exams (where such are required)	F. Currentness of equipment	G. Percent of libraries meeting ACRL* standards	H. Progress of literacy students	I. Performance of transfers after two semesters
FACTOR II. Access	A. Enrollment of high school dropouts; handicapped; disadvantaged; single parents; nontraditional high school diploma earners; inmates	B. Number served by type through literacy programs and percent of target population served	C. Number of GED's and AHSD's awarded compared to the number of dropouts statewide	*D. Number & percent of dropouts annually who are served by literacy programs*	E. Percent of students receiving financial aid *and amount of aid compared with cost of attendance*	F. Number of students moving from literacy to some other educational program	G. Percent of population in service area enrolled		
FACTOR III. Education Continuum	A. Number & percent of recent high school graduates enrolled in community college programs	B. Number of & enrollment in cooperative agreements with high schools	C. Number & percent of students in the UNC system who attended a community college	D. Number of & enrollment in college contractual agreements for college transfer					
FACTOR IV. Workforce Development	A. number of employers and trainees served by: New & Expanding Industry, FIT, Small Business Centers, Apprenticeship programs	B. Number of workplace literacy sites and number of students being served	*C. Employer satisfaction with graduates*	*D. Employment status of graduates*					
FACTOR V. Community Services	A. Number of courses offered & students enrolled through community services (avocational, practical skills, academic, and recreational)	B. Number of persons from special populations in avocational, practical skills, academic, and recreational courses	C. Support of community service activities (use of facilities by outside groups; support of civic and cultural activities)	D. Local government support of colleges	E. Non-government support of colleges				
FACTOR VI. Program Management/ Accountability	A. Annual educational program audit summary-- number audited & percent of system instructional budget cited for exceptions	B. Number and percent of programs reviewed	C. Number and percent of eligible programs accredited or reaffirmed						

*ACRL: American College and Research Library

Future Prospects

The development of the critical success factors will aid the State Board of Community Colleges in setting strategic goals for the system. By indicating how the system has performed and is performing currently in key areas, the factors will provide a foundation for adopting reasonable targets for future efforts.

The critical success factors for the system provide a model for the individual institutions. The National Alliance Model, which includes a process for developing, validating and revising the chart, is recommended for developing critical success factors relevant to each college's own goals and mission.

In response to increased calls for accountability from the general assembly, the Southern Association for Colleges and Schools (SACS), and the federal government, it is anticipated that the system's critical success factors will be reexamined and modified to include more performance data. The critical success factors measures will play a major role as the system develops strategies to respond to such mandates as Right to Know and the Carl Perkins Act. It is clear that as the data base and analytic capacity of the system is improved, more accurate and revealing analysis will be possible.

It is to the interest of the system that the critical success factors provide useful and relevant data to the public, the governing boards and the general assembly. They will reveal ways in which the system can improve and progress, and the leadership of the system can use them for positive change.

CRITICAL SUCCESS FACTOR I: QUALITY

The credibility of educational institutions across the nation has been in a downward spiral for the past two decades. The faltering of the American economy and the loss of the nation's standing as the "best in the world" have caused more and more people to question the quality of our schools, colleges and universities. Business leaders are quick to point to a labor force that is lacking the skills necessary if business is to compete in a world market. Educational institutions are criticized for failing to equip students for informed citizenship and productive employment through high quality educational programs with strong content, effectively presented.

If the nation is to regain its position in the world marketplace, then community colleges, as well as all other educational institutions, must foster a "culture of quality." As was emphasized by the Commission on the Future, "quality teaching and support services" should be provided for every student. Without that emphasis, the time, effort and other resources which go into providing community college education are meaningless, of little value to students or their future employers and associates.

The measurement of quality has been much discussed, and still remains elusive. However, as one observer has put it, "The choice is between 'no measures' (subjective judgments) and 'imperfect proxies.' Criticism that measures used are not perfect isn't relevant" (Brown, 1990). Quality is measured by both the production factors going in (input measures), the methods of production (process measures) and the results (output). The first are easier to measure, but the last are essential, though difficult.

For the 1990-91 report on critical success factors, the State Board has adopted the following measures for "Quality":

A. Institutional Salaries as a Percent of the Southeastern Regional Average

B. Participation in Staff Development Programs: Tier A

C. Persistence of Students Toward Completion of Goals (Literacy Students Only)

D. Number of Students Returning from Previous Quarters

E. Rate of Success on Licensure Exams (where such are required)

F. Currentness of Equipment

G. Percent of Libraries Meeting American College and Research Library Standards for Community, Junior and Technical College Learning Resource Centers

H. Number of Students Moving From One Level of Literacy to Another

I. Performance of Transfers After Two Semesters

6\7

QUALITY MEASURE A: Institutional Salaries as a Percent of the Southeastern Regional Average

Background

This measure is an indicator of a key "input" to education: the personnel who make it happen. While it is true that dedicated people will provide very high quality education for low salaries, it is unrealistic to expect that education can continue to attract highly skilled, knowledgeable people who have significantly higher paying alternatives. If these alternatives are in other educational systems-- if a dedicated teacher can teach elsewhere for more pay-- it is even more unrealistic. In addition, community colleges must compete for technically skilled people in areas like electronics and nursing, in which the relevant labor market is outside education. Measures for market competitiveness of salaries should be developed.

At present, comparative data are available only for faculty salaries, though the salaries of other personnel, from librarians to business officers and counselors, also indicate the quality of the education and services available to students. We are also able to measure and compare only full-time salaries, and colleges are heavy users of part-time personnel.

The Commission on the Future recommended that the goal be to raise North Carolina Community College System salaries to the upper quartile of community college salaries in the Southeast. We have chosen to use the salaries in the southeastern region as a conservative basis for comparison since these other states are similar to North Carolina in terms of cost of living. Other things to consider include the fact that technical education is a greater part of what community colleges do in North Carolina than elsewhere, even in the South, and that technical personnel are typically more expensive.

Attaining the average is not setting a very high goal, especially since southeastern regional salaries are 92 percent of the national average. Also, the average is a moving target, since it will change when any state makes an effort to raise salaries. This benchmark should be revisited periodically to insure that it is appropriate.

Salaries are not measured or reported consistently between states and the data are confusing. The average monthly salary, including fringes, is considered to be the most comparable figure, since colleges and systems define full-time in various ways. The salary question also involves issues related to longevity: a long-time faculty member may have a higher salary due to seniority, or conversely, it may have been necessary to pay more to get the newest person in a competitive labor market.

Implications

The data indicate that North Carolina remains significantly behind the southeastern regional average. The sudden drop in North Carolina's rank in 1991 was due primarily to a change in the way annual salary is calculated by the Southern Regional Education Board (SREB). In previous years the calculation of salaries for North Carolina by the SREB had inflated the actual salary figure. The 1991 salary figure is actual average salary paid in North Carolina rather than a statistically derived figure.

The impact of low salaries is reflected in reports of colleges losing key personnel, especially to industry, and in not being able to hire their first choice in certain fields. The study of faculty and staff in the system which is currently being conducted by the Department of Community Colleges will provide additional information on salaries.

Data

NORTH CAROLINA COMMUNITY COLLEGE FACULTY SALARIES AS A PERCENTAGE OF THE SOUTHEAST AVERAGE AND RANK AMONG 15 SOUTHEASTERN STATES

Year	Percentage	Rank
1986	84.8	13th
1988	86.8	12th
1989	86.0	10th
1990	84.9	9th
1991	81.5	15th

Source: SREB Fact Book On Higher Education

Frequency: Biennial.

Scope: Southeast, state level data.

Contact: Joe Marks, SREB.

Recommendation

Improving salary levels is a major cost item. The issues related to salaries are part of a study currently underway, and should be the subject of continuing study. Full- and part-time faculty and staff salaries and workloads in the various community college program areas should be examined. We should continue to work with the SREB and other agencies to try to establish the monthly salary as the basis for comparison and to develop a consistent approach to collecting and reporting the data. Alternative benchmarks should also be investigated particularly in terms of market competitiveness.

QUALITY MEASURE B: Participation in Staff Development Programs: Tier A

Background

Like salaries, participation in staff development programs is an "input" indicator of the quality of teaching. Instructors who stay up-to-date in their field and incorporate new teaching technologies and methods into their delivery provide better quality instruction. Staff development activities also boost morale and creativity. Similar effects are realized by personnel in all classifications.

There is currently no way to measure the level of participation in staff development programs. The only indicator available is participation in "Tier A" programs, which are funded separately and have been restricted to certain types of activities. Prior to 1989-90 only faculty were eligible for Tier A program support. Other staff also need staff development activities. Funding for Tier A has remained at $1.23 million each year over the five years the program has been in effect, thus not improving even to cover inflation. In addition, restrictions on the use of these funds were lifted as part of a flexibility measure to help colleges deal with the budget cuts of the last two years. Thus, colleges were able to use the funds to meet any legitimate college need.

In the course of normal operations, colleges spend additional dollars and involve personnel in developmental activities which are not covered by these funds. For example, travel funds are typically made available from college operating budgets to enable staff to attend conferences, etc. Colleges also hold on-campus developmental activities not covered with special funds. However, only limited funds are available from operating budgets, which are particularly restricted at this time.

Implications

In 1990-91, Tier A funding enabled the majority of full-time faculty and many part-time faculty to participate in return-to-industry and other types of staff development programs. It has been a boon, but still does not support the quality and extent of programs needed. In times of budget exigency, as now, staff development funds are often the first to be appropriated for other uses. In view of the importance of up-to-date faculty in our programs, these measures over the long run may be shortsighted.

There has been a 13.7 percent increase in the numbers of people served in Tier A in 1990-91. As can be seen in the data presented below, the increase in participation was in the area of faculty upgrade with a 43.5 percent increase over the number served in 1989-90. Participation in return-to-industry declined by 34.9 percent in 1990-91. It should be noted that this change in participation rate may be due to cost considerations. Faculty upgrade activities cost much less than do return-to-insdustry activities.

In view of the Commission's recommendation that eventually all colleges should use two percent of their operating budgets for staff development, the task force on staff development is formulating guidelines for determining what constitutes such spending. Reporting personnel involvement and funds used in meeting those guidelines will make this data more meaningful.

Data

PARTICIPATION IN TIER A STAFF DEVELOPMENT PROGRAMS, FOR FULL- AND PART-TIME FACULTY, FY 1990-91

TYPE OF PROGRAM	NUMBER OF PARTICIPANTS	% CHANGE IN NUMBER OF PARTICIPANTS: 1989-90 TO 1990-91
Return-To-Industry	429	-34.9
Faculty Upgrade	1543	+43.5
TOTAL	1972	+13.7
Avg. No. Per Institution	34	+13.7

Definitions:

THE "RETURN-TO-INDUSTRY PROGRAM" is defined as those activities which provide on-the-job training in a private or public industry or business. Instructors take professional leave with pay to work in a business or industry in their area of expertise for a specified length of time.

THE "FACULTY UPGRADE PROGRAM" allows instructors to travel to businesses and industries, attend workshops and seminars, investigate new technologies, experiment with new delivery systems, attend classes and take part in ancillary programs that promote professional growth.

Source: Professional Competencies Program Final Report.

Frequency: Annual

Scope: System and institution data.

Contact: Bob Allen, Program Development Services

PARTICIPATION IN TIER A STAFF DEVELOPMENT PROGRAMS, FOR FULL- AND PART-TIME FACULTY, FY 1990-91

INSTITUTION	FTE	RETURN TO INDUSTRY	FACULTY UPGRADE	% CHANGE IN NUMBER OF PARTICIPANTS: 1989-90 TO 1990-91
	< 1,000			
Pamlico CC	200	1	8	12.5
Montgomery CC	661	6	13	26.7
Bladen CC	707	1	10	22.2
Tri-County CC	721	4	9	-18.9
Anson CC	743	0	9	-22.2
McDowell TCC	876	8	10	-21.2
Martin CC	882	4	44	182.4
Roanoke-Chowan CC	935	4	10	-51.7
	1,000-1,999			
James Sprunt CC	1,061	8	24	6.7
Brunswick CC	1,093	4	5	-43.8
Mayland CC	1,196	3	29	68.4
Halifax CC	1,263	14	23	16.6
Piedmont CC	1,294	3	40	330.0
Carteret CC	1,304	7	22	31.9
Sampson CC	1,309	11	14	78.6
Southwestern CC	1,355	17	9	188.9
Nash CC	1,361	4	25	-17.1
Wilson CC	1,381	7	31	35.7
College of the Albemarle	1,435	1	6	-56.3
Southeastern CC	1,497	1	10	-59.3
Cleveland CC	1,509	6	6	-25.0
Mitchell CC	1,510	9	64	160.7
Beaufort Co. CC	1,543	2	7	-47.1
Haywood CC	1,558	6	6	-29.4
Stanly CC	1,588	2	11	-13.3
Blue Ridge CC	1,597	4	11	-25.0
Richmond CC	1,615	0	3	-40.0
Randolph CC	1,662	6	9	-16.7
Rockingham CC	1,790	3	15	5.9
Edgecombe CC	1,860	2	24	-21.2
Craven CC	1,934	4	8	-20.0
Robeson CC	1,963	15	33	108.7
	2,000-2,999			
Isothermal CC	2,046	7	75	382.4
Caldwell CC	2,119	10	62	33.3
Vance-Granville CC	2,133	9	4	-83.0
Davidson CC	2,255	7	12	-13.7
Wayne CC	2,441	52	90	238.1
Wilkes CC	2,463	5	45	104.2
Surry CC	2,473	3	25	21.7
Western Piedmont CC	2,500	6	23	-21.7
Lenoir CC	2,503	14	98	115.4
Rowan-Cabarrus CC	2,669	4	6	-83.1
Johnston CC	2,682	16	30	-24.6
Cape Fear CC	2,822	3	22	66.7
Sandhills CC	2,875	0	*****	*****
Pitt CC	2,921	5	12	-63.8
	3,000-4,999			
Catawba Valley CC	3,005	10	14	-17.2
Gaston CC	3,011	9	6	-40.0
Asheville-Buncombe TCC	3,082	3	7	-69.7
Coastal Carolina CC	3,253	23	33	-17.6
Alamance CC	3,316	4	1	-16.7
Durham CC	3,457	2	5	-68.2
Central Carolina CC	3,553	4	80	-6.7
Forsyth CC	4,187	12	26	-13.6
	> 5,000			
Wake CC	5,348	7	37	-2.2
Guilford CC	6,122	3	162	175.0
Fayetteville CC	6,910	24	30	-48.6
Central Piedmont CC	10,048	20	90	66.7

**Does not include BISP participation

Recommendation

The task force on staff development will develop guidelines for spending in staff development. (See Implications, above.) When available, the appropriate data should be used for this measure. Such a measure should include staff development activities for all staff, not faculty only, and should provide evidence of the extent of involvement, such as hours or days devoted to developmental activities.

QUALITY MEASURE C: Persistence of Students Toward Completion of Goals

Background

Student achievement is the key measure of quality. While there are several measures that indicate student achievement, the attainment of goals is the most appropriate comprehensive measure for the community college student. These students often have goals other than graduation or transfer. They may wish to learn a skill, try out a new interest, qualify for a promotion or new job-- none of which may mean that they need to complete an entire program.

Many colleges and universities are measuring the abilities and knowledge of entering students through testing programs, an approach which enables them to retest and quantify progress during or at the end of the student's course of study. At this time, most community colleges do not do this in a comprehensive way. Given that community college students may come with backgrounds as varied as a college degree or not even a high school diploma, such testing may have limited applicability In addition, the approximately 280 different program titles offered in the community college system would require a large number of different pre- and post-tests; and in some areas such tests are not available. In North Carolina, a testing program for students coming into the literacy programs has been adopted, and the progress in terms of attainment from that base is being measured.

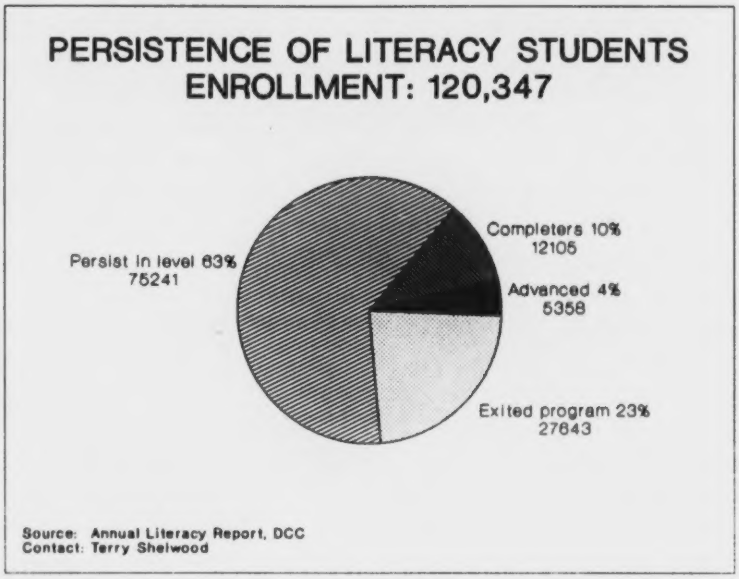
The Literacy Education Information System does provide for collection of data on student goals in the form of a direct question about goals to be asked of students at registration. This is the first step in a student progress monitoring system that will enable the community colleges to document outcomes and measure goal attainment. The system will be difficult to develop and implement, and will require that resources of money, personnel and time be devoted to it. When in place, it will be the key to an output measurement system as well as a valuable tool for student advisement and program improvement.

Implications

Data are being collected with the Literacy Education Information System (LEIS) relative to students' goals. At this time, however, the data are not complete enough to allow for the programming necessary to determine persistence of students toward their stated goals. Rather than not report on this measure it was decided to report instead on the persistence of literacy students in achieving specific levels of literacy. Data are available on the number and percent of literacy students who are persisting in the literacy level they entered, who have advanced to the next level of literacy, who have completed a literacy level and exited the program, and who have exited the program without completing the level entered. The pie chart below summarizes the data.

The data indicate that 77 percent of the literacy students are either pursuing a certain level of literacy or have achieved a level of literacy and exited the program; only 23 percent have exited the program without completing a specific level of literacy. Whereas the data do not allow for analysis of the persistence of literacy students towards the completion of their goals, the data do demonstrate that the majority of literacy students have either achieved a certain level of literacy or are actively persisting in the achievement of a certain level of literacy.

Data



PERSISTENCE OF LITERACY STUDENTS
ENROLLMENT: 120,347

Source: Annual Literacy Report, DCC
Contact: Terry Shelwood

Recommendation

Refinements in the data and their analysis should continue for literacy students. Programming should be undertaken to determine the number of students who achieve their specified goals or who are actively pursuing those goals. In addition, emphasis should be given to the development and implementation of the student progress monitoring system in order to obtain information similar to the above for all students.

QUALITY MEASURE D: Number of Students Returning from Previous Quarters

Background

Although there are many reasons why students cannot attend classes in any one quarter, or why they drop out altogether, the quality of the program is one of those reasons. Students who continue studies from quarter to quarter show commitment to a program and progress toward completion. A report on retention in the community college system was conducted in 1987 (Lincoln and Smith, 1987). That study is a more extensive discussion of retention issues.

Efforts are underway to develop a meaningful definition of retention for community college students. Factors which must be considered in developing such a measure include the level of student preparedness, type of program (certificate, degree, diploma), level of student participation (part-time vs. full-time), program offering, student intent, etc. It is possible that a single measure of retention will not be appropriate but rather different measures may be necessary for different groups.

The current definition of retention being used focuses on the percent of curriculum students who enroll in fall quarter and subsequently enroll in either winter or spring quarter. Specifically, using curriculum enrollment data, the proportion of students who enrolled in fall quarter, did not complete their program in fall quarter and subsequently enrolled in winter and/or spring quarter of the same year was calculated. Special studies students (non-credit), co-op students, and dual enrollment students were omitted from the analysis. Only data for the past three years could be examined due to the lack of student specific data on graduation prior to 1988.

Implications

It is not possible at this time to make any value judgments relative to the data on the proportion of fall curriculum enrollees who return for at least one other quarter during the same academic year. Further analysis needs to be conducted on the data to determine the impact of factors such as type of program, student intent, and attendance of students (part-time vs. full-time). In addition, an appropriate comparison group outside the North Carolina Community College System needs to be identified in order to determine what is a "good" retention rate. Finally, data from more than three years need to be examined in order to determine changes in retention rates over time.

What can be said from the data that are available, however, is that the retention rate for the system is improving. This may be due to more students entering the college transfer program or may be a commentary on the state of the economy. That is to say, more people may be choosing to remain in school in order to acquire more marketable skills or may choose to stay in school until the job market improves.

Data

PROPORTION OF FALL CURRICULUM STUDENTS WHO SUBSEQUENTLY ENROLL IN THE WINTER AND/OR SPRING QUARTER OF THE SAME ACADEMIC YEAR

YEAR	% RE-ENROLL
1988-89	66.6
1989-90	67.6
1990-91	74.9

Source: Planning and Research Unit, DCC

Data: Quarterly Registration

Contact: J. Keith Brown

Recommendation

A more comprehensive examination of student enrollment data should be conducted as resources permit. Factors which might affect retention, such as student intent, should be examined. In addition, student retention should be analyzed separately for full-time and part-time students. Information on retention rates for other community college systems should be collected.

FALL CURRICULUM STUDENTS WHO SUBSEQUENTLY ENROLL IN THE WINTER AND/OR SPRING QUARTER OF THE SAME ACADEMIC YEAR

Institution	FTE	1989-89	1989-90	1990-91
	< 1,000			
Pamlico CC	200	64.0	67.9	81.6
Montgomery CC	661	67.4	70.2	84.3
Bladen CC	707	64.3	65.7	72.2
Tri-County CC	721	69.2	72.3	79.2
Anson CC	743	56.3	51.9	33.4
McDowell TCC	876	*****	71.4	81.6
Martin CC	882	68.0	68.8	82.8
Roanoke-Chowan CC	935	77.3	74.2	90.5
	1,000-1,999			
James Sprunt CC	1,061	64.0	72.2	77.4
Brunswick CC	1,093	61.6	56.5	69.0
Mayland CC	1,196	62.8	70.6	77.4
Halifax CC	1,263	71.1	74.5	88.3
Piedmont CC	1,294	62.9	69.1	79.2
Carteret CC	1,304	73.4	73.5	81.5
Sampson CC	1,309	75.6	73.7	87.8
Southwestern CC	1,355	68.5	68.5	74.2
Nash CC	1,361	61.7	72.4	77.7
Wilson CC	1,381	65.7	68.8	73.8
College of the Albemarle	1,435	67.3	69.1	74.7
Southeastern CC	1,497	66.0	69.5	78.6
Cleveland CC	1,509	66.9	63.3	72.3
Mitchell CC	1,510	71.9	72.5	83.7
Beaufort Co. CC	1,543	71.0	71.6	83.2
Haywood CC	1,558	71.2	74.3	82.7
Stanly CC	1,588	63.1	66.1	72.6
Blue Ridge CC	1,597	69.9	71.3	82.9
Richmond CC	1,615	75.4	73.4	90.0
Randolph CC	1,662	76.0	79.5	95.3
Rockingham CC	1,790	74.0	80.4	85.6
Edgecombe CC	1,860	70.0	71.5	73.6
Craven CC	1,934	69.1	69.7	77.0
Robeson CC	1,963	67.4	70.7	78.8
	2,000-2,999			
Isothermal CC	2,046	69.3	70.0	77.4
Caldwell CC	2,119	64.9	74.7	74.2
Vance-Granville CC	2,133	69.1	70.6	79.6
Davidson CC	2,255	73.6	76.9	83.2
Wayne CC	2,441	76.5	75.7	86.8
Wilkes CC	2,463	71.4	75.5	82.6
Surry CC	2,473	70.2	73.9	81.3
Western Piedmont CC	2,500	67.6	70.5	74.8
Lenoir CC	2,503	74.5	76.0	84.5
Rowan-Cabarrus CC	2,669	61.7	65.2	76.7
Johnston CC	2,682	76.2	73.8	79.9
Cape Fear CC	2,822	66.5	68.8	73.7
Sandhills CC	2,875	79.6	81.2	89.0
Pitt CC	2,921	70.2	62.9	63.8
	3,000-4,999			
Catawba Valley CC	3,005	65.4	67.2	78.6
Gaston CC	3,011	68.4	68.0	77.4
Asheville-Buncombe TCC	3,082	69.7	68.2	72.0
Coastal Carolina CC	3,253	69.1	66.7	69.5
Alamance CC	3,316	66.5	67.4	75.2
Durham CC	3,457	59.9	59.9	65.1
Central Carolina CC	3,553	65.9	64.7	76.0
Forsyth CC	4,187	69.6	72.0	75.9
	> 5,000			
Wake CC	5,348	59.1	60.8	63.5
Guilford CC	6,122	71.2	63.5	74.0
Fayetteville CC	6,910	66.6	64.0	75.3
Central Piedmont CC	10,048	55.5	60.5	65.6

QUALITY MEASURE E: Rate of Success on Licensure Exams

Background

There are 27 technical/vocational curriculums which prepare students for licensing exams. Not all the licensing boards have cooperated with the Department by providing data. This year data from fourteen of the licensing boards were obtained. The data obtained from the licensing boards is for first time test takers who took the exam between July 1, 1990 and June 30, 1991. The one exception to this is the insurance exam results which were for January 1, 1991 - December 31, 1991.

Passing rates indicate how successful the program has been. However, passing rates can be affected by the native ability of the students or their preparation prior to entering the curriculum. In addition, many students take coursework to learn a skill and do not necessarily intend to become licensed. Since these students do not take the licensure test, the success of programs in their preparation cannot be determined using passing rates on exams. Finally, without established baselines on examination passing rates it is difficult to make judgements as to what constitutes a "good" or "bad" passing rate.

Implications

In the case of nursing, graduates of associate degree and baccalaureate degree programs take the same examination to become licensed as a registered nurse, and community college associate degree graduates have consistently had higher passing rates than baccalaureate nursing program graduates.

The nursing data show very high passing rates for community college graduates, indicating that continued support for this program is warranted. Nursing scores have been maintained even though the numbers enrolled and completing are expanding rapidly.

Data on the passing rates for 23 other exams were obtained. The data for several of these exams, however, were available for the first time this year. No trend data in passing rates for community college students on these exams are available. In addition, comparative data on passing rates for students who were not enrolled in community colleges or students in training programs in other states were not available. This limits our ability to evaluate how well our students are doing.

Four of the licensure exams had a passing rate of less than 70 percent. At this point it is not known why the rates were as low as they were nor how these rates compare with the passing rates of other schools. In the cases of real estate and insurance, it should be pointed out that students do not have to complete the program to be eligible for the licensure exam. It is likely that a large number of students taking the exam, especially those taking the exam for the first time (which are reported here), have only completed the minimum required courses for the exam, not the entire program.

Data

PERCENTAGE OF NCCCS GRADUATES PASSING THE NC LICENSING EXAM FOR NURSES (RN), 1986-91

YEAR	# OF CC GRAD. TAKING EXAM	CC GRADUATES AS % OF TOTAL TAKING EXAM	% OF GRADUATES PASSING EXAMS	% NON-CC TAKERS PASSING EXAM	
				HOSPITAL DIPLOMA	UNIV.
1987	989	61	86	92	81
1988	884	48	88	86	80
1989	1,078	71	88	83	85
1990	1,303	73	94	94	92
1991	1,332	73	94	94	91

Source: NC Board of Nursing

Frequency: Exam administered biannually.

Scope: System level data.

Contact: Mary Ann Brewer, NC Board of Nursing;
Vercie Eller, Curriculum Coordinator of Nursing Programs, DCC.

PERCENTAGE OF COMMUNITY COLLEGE STUDENTS PASSING LICENSING AND CERTIFICATION EXAMINATIONS

FIELD	NUMBER OF STUDENTS TAKING EXAM	% PASSING EXAM
Aviation Maintenance	42	96
Cosmetology	693	72
Dental Assisting	159	76
Dental Hygiene	110	95
Emergency Medical		
Defibrillation	496	96
Ambulance Attendant	214	93
Emergency Medical Tech.	3,514	73
EMT-Intermediate	639	93
Mobile Nurse	19	100
EMT-Paramedic	51	96
EMT-Advanced	105	100
Insurance		
Life, Accident, Health	705	66
Fire & Casualty	976	55
Medical Records	6	83
Medical Sonography	20	60
Nursing		
RN	1,332	94
PN	860	95
Occupational Therapy	24	63
Optical Lab	15	80
Physical Therapist Assistant	45	89
Real Estate		
Broker	396	68
Sales	1,760	72
Veterinary Medicine Tech.	20	100

Source: Planning and Research Unit, DCC

Contact: Paul Nagy

Recommendation

These data are especially valuable. They have a direct and unambiguous relationship to the quality of the program and should be carefully monitored over time.

The remaining licensing boards must begin to supply the data on community college graduates. Difficulties identifying these graduates can and should be overcome. Comparative data on passing rates for each licensure exam should be identified and collected.

PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS

NURSING

		PRACTICAL NURSE		REGISTERED NURSE	
INSTITUTION	FTE	# TESTED	% PASS	# TESTED	% PASS
	< 1,000				
Pamlico CC	200				
Montgomery CC	661	17	76		
Bladen CC	707				
Tri-county CC	721	11	100		
Anson CC	743	18	94		
McDowell CC	876	15	80		
Martin CC	882				
Roanoke-Chowan CC	935	29	93	18	100
	1,000-1,999				
James Sprunt CC	1,061			53	94
Brunswick CC	1,093	13	100		
Mayland CC	1,196	16	100		
Halifax CC	1,263				
Piedmont CC	1,294				
Carteret CC	1,304	16	100		
Sampson CC	1,309			22	91
Southwestern CC	1,355	10	100		
Nash CC	1,361				
Wilson TCC	1,381				
College of the Albemarle	1,435	12	100	15	100
Southeastern CC	1,497	10	100	40	93
Cleveland CC	1,509	14	100		
Mitchell CC	1,510			25	96
Beaufort Co. CC	1,543			33	100
Haywood CC	1,558	13	100		
Stanly CC	1,588			28	96
Blue Ridge CC	1,597			27	100
Richmond CC	1,615	13	85	14	93
Randolph CC	1,662			13	92
Rockingham CC	1,790	16	81	16	94
Edgecombe CC	1,860				
Craven CC	1,934	15	93	47	89
Robeson CC	1,963	29	93	21	100
	2,000-2,900				
Isothermal CC	2046	10	100		
Caldwell CC & TI	2119	35	94	38	100
Vance-Granville CC	2133	9	100	19	89
Davidson CC	2255			27	96
Wayne CC	2441			22	100
Wilkes CC	2463			19	100
Surry CC	2473			32	100
Western Piedmont CC	2500			38	87
Lenoir CC	2503	20	95	14	93
Rowan-Cabarrus CC	2669	21	95	36	83
Johnston CC	2682	24	100	22	95
Cape Fear CC	2822	15	93		
Sandhills CC	2875	14	86	36	97
Pitt CC	2921	39	97	33	94
	3,000-4,999				
Catawba Valley CC	3,005			35	91
Gaston College	3,011			23	100
Asheville-Buncombe TCC	3,082	30	93	45	96
Coastal Carolina CC	3,253	13	100	21	100
Alamance CC	3,316	35	100	28	89
Durham CC	3,457	30	90	21	100
Central Carolina CC	3,553	32	97	19	84
Forsyth TCC	4,187	63	90	82	98
	> 5,000				
Wake TCC	5,348			72	96
Guilford TCC	6,122	62	100	41	100
Fayetteville TCC	6,910	21	90	48	88
Central Piedmont CC	10,048	15	100	50	100

PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS

EMERGENCY MEDICAL TECHNOLOGY

		EMER. MED. TECH.		EMT- INTERMED.		EMT- ADVANCED	
INSTITUTION	FTE	# TESTED	% PASS	# TESTED	% PASS	# TESTED	% PASS
	< 1,000						
Pamlico CC	200	13	69				
Montgomery CC	661	20	65	2	100		
Bladen CC	707	6	33				
Tri-county CC	721	27	100	1	100	10	100
Anson CC	743	62	68	20	95	6	100
McDowell CC	876	35	80				
Martin CC	882	25	32				
Roanoke-Chowan CC	935	55	64				
	1,000-1,999						
James Sprunt CC	1,061	22	55				
Brunswick CC	1,093	67	57				
Mayland CC	1,196	56	68	12	100	5	100
Halifax CC	1,263	43	67	5	100		
Piedmont CC	1,294	19	84				
Carteret CC	1,304	77	77	3	100		
Sampson CC	1,309	30	50				
Southwestern CC	1,355	24	92	34	88		
Nash CC	1,361	99	63	12	100		
Wilson TCC	1,381	29	45	5	100		
College of the Albemarle	1,435	110	72	23	96	26	100
Southeastern CC	1,497	39	64	6	100		
Cleveland CC	1,509	40	63	20	80		
Mitchell CC	1,510	35	54				
Beaufort Co. CC	1,543	57	67	1	100		
Haywood CC	1,558	54	74	6	83	9	100
Stanly CC	1,588	22	64				
Blue Ridge CC	1,597	34	85				
Richmond CC	1,615	64	56				
Randolph CC	1,662	66	71				
Rockingham CC	1,790	25	64	2	100		
Edgecombe CC	1,860	5	40	16	100		
Craven CC	1,934	86	81	20	85	6	100
Robeson CC	1,963	34	71	12	100		
	2,000-2,999						
Isothermal CC	2,046	44	70	17	82	1	100
Caldwell CC & TI	2,119	56	79	9	100	2	100
Vance-Granville CC	2,133	86	67	57	96		
Davidson CC	2,255	90	61	16	94	2	100
Wayne CC	2,441	85	67				
Wilkes CC	2,463	31	84	18	83	18	100
Surry CC	2,473	73	73	4	75		
Western Piedmont CC	2,500	44	68	7	100		
Lenoir CC	2,503	39	74	2	50		
Rowan-Cabarrus CC	2,669	114	81	1	100		
Johnston CC	2,682	37	54	34	94		
Cape Fear CC	2,822	96	78	13	100		
Sandhills CC	2,875	22	59				
Pitt CC	2,921	54	76				
	3,000-4,999						
Catawba Valley CC	3,005	29	86	7	100		
Gaston College	3,011	82	73			4	100
Asheville-Buncombe TCC	3,082	118	78	58	98	1	100
Coastal Carolina CC	3,253	111	89	40	88		
Alamance CC	3,316	47	87	1	100		
Durham CC	3,457	88	84	6	100		
Central Carolina CC	3,553	116	72	34	82		
Forsyth TCC	4,187	92	73	16	100		
	> 5,000						
Wake TCC	5,348	174	80	5	100		
Guilford TCC	6,122	136	65	24	100		
Fayetteville TCC	6,910	83	81	9	78	4	100
Central Piedmont CC	10,048	187	93	41	90	11	100

PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS

EMERGENCY MEDICAL TECHNOLOGY

		EMT-DEFIBRILATION		AMBULAN. ATTEND.		MOBILE NURSE		EMT-PARAMEDIC	
INSTITUTION	FTE	# TESTED	% PASS	# TESTED	% PASS	# TESTED	% PASS	# TESTED	% PASS
	< 1,000								
Pamlico CC	200	9	100						
Montgomery CC	661							25	92
Bladen CC	707								
Tri-county CC	721			8	75				
Anson CC	743	5	100						
McDowell CC	876								
Martin CC	882								
Roanoke-Chowan CC	935	25	96						
	1,000-1,999								
James Sprunt CC	1,061	10	90						
Brunswick CC	1,093			18	100				
Mayland CC	1,196	4	100						
Halifax CC	1,263			6	100	1	100		
Piedmont CC	1,294					1	100	1	100
Carteret CC	1,304	32	94	21	90				
Sampson CC	1,309								
Southwestern CC	1,355	7	100	10	90				
Nash CC	1,361					1	100	17	82
Wilson TCC	1,381					2	100	11	100
College of the Albemarle	1,435	38	97	1	0			1	100
Southeastern CC	1,497								
Cleveland CC	1,509					1	100	3	100
Mitchell CC	1,510	14	93						
Beaufort Co. CC	1,543	10	100						
Haywood CC	1,558					1	100	10	100
Stanly CC	1,588								
Blue Ridge CC	1,597							1	100
Richmond CC	1,615	52	96						
Randolph CC	1,662							6	100
Rockingham CC	1,790							13	100
Edgecombe CC	1,860					4	100	4	100
Craven CC	1,934	10	100	10	100				
Robeson CC	1,963	5	60						
	2,000-2,999								
Isothermal CC	2,046					1	100	25	96
Caldwell CC & TI	2,119	2	100					8	100
Vance-Granville CC	2,133	45	98	8	75				
Davidson CC	2,255			10	100			45	100
Wayne CC	2,441	7	86	27	93				
Wilkes CC	2,463							9	100
Surry CC	2,473							13	100
Western Piedmont CC	2,500							38	100
Lenoir CC	2,503	3	100	23	96				
Rowan-Cabarrus CC	2,669							18	83
Johnston CC	2,682	24	96					3	67
Cape Fear CC	2,822	1	100	1	100			13	100
Sandhills CC	2,875	20	100	11	91				
Pitt CC	2,921			12	92				
	3,000-3,999								
Catawba Valley CC	3,005							19	100
Gaston College	3,011								
Asheville-Buncombe TCC	3,082	90	98	36	94	3	100	65	98
Coastal Carolina CC	3,253							19	95
Alamance CC	3,316	78	95					8	63
Durham CC	3,457	5	80					23	100
Central Carolina CC	3,553							1	100
Forsyth TCC	4,187			12	92	2	100	17	100
	> 5,000								
Wake TCC	5,348								
Guilford TCC	6,122					2	100	53	94
Fayetteville TCC	6,910							9	100
Central Piedmont CC	10,048							43	98

PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS

REAL ESTATE

		SALES		BROKER	
INSTITUTION	FTE	# TESTED	% PASS	# TESTED	% PASS
	< 1,000				
Pamlico CC	200	1	100	3	100
Montgomery CC	661				
Bladen CC	707	8	50		
Tri-county CC	721	16	69	7	43
Anson CC	743	15	67		
McDowell CC	876	7	71		
Martin CC	852				
Roanoke-Chowan CC	935				
	1,000-1,999				
James Sprunt CC	1,061	4	50		
Brunswick CC	1,093	57	75	14	100
Mayland CC	1,196	9	78		
Halifax CC	1,263	16	69	2	100
Piedmont CC	1,294	8	88		
Carteret CC	1,304	11	91		
Sampson CC	1,309	3	67		
Southwestern CC	1,355	17	65		
Nash CC	1,361	40	78	12	58
Wilson TCC	1,381	10	80	1	100
College of the Albemarle	1,435	45	53	2	100
Southeastern CC	1,497	3	67	2	50
Cleveland CC	1,509	8	75		
Mitchell CC	1,510	13	77		
Beaufort Co. CC	1,543	9	67	5	60
Haywood CC	1,558	11	55		
Stanly CC	1,588	12	50	3	67
Blue Ridge CC	1,597	22	82		
Richmond CC	1,615	2	100		
Randolph CC	1,662	21	57	2	100
Rockingham CC	1,790	5	80	6	67
Edgecombe CC	1,860	17	82		
Craven CC	1,934	12	92	5	80
Robeson CC	1,963	1	0	1	100
	2,000-2,999				
Isothermal CC	2,046	19	42		
Caldwell CC & TI	2,119	25	52	4	100
Vance-Granville CC	2,133	8	50		
Davidson CC	2,255	48	79	6	83
Wayne CC	2,441	7	71		
Wilkes CC	2,463	17	47	5	80
Surry CC	2,473	24	50	8	63
Western Piedmont CC	2,500	21	71	5	20
Lenoir CC	2,503	12	83	1	100
Rowan-Cabarrus CC	2,669	51	53	5	60
Johnston CC	2,682	20	75		
Cape Fear CC	2,822	53	75	40	70
Sandhills CC	2,875	45	62	11	64
Pitt CC	2,921	35	80	9	78
	3,000-4,999				
Catawba Valley CC	3,005	43	70	13	85
Gaston College	3,011	82	71	15	73
Asheville-Buncombe TCC	3,062	9	89	3	67
Coastal Carolina CC	3,253	24	67	3	100
Alamance CC	3,316	49	71	19	84
Durham CC	3,457	104	54	17	88
Central Carolina CC	3,553	24	75	9	44
Forsyth TCC	4,187	78	72	10	60
	> 5,000				
Wake TCC	5,348	68	84	26	69
Guilford TCC	6,122	97	66	34	85
Fayetteville TCC	6,910	43	58	10	70
Central Piedmont CC	10,048	351	68	78	62

PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS

INSURANCE

		LIFE, ACCIDENT, HEALTH		FIRE & CASUALTY	
INSTITUTION	FTE	# TESTED	% PASS	# TESTED	% PASS
	< 1,000				
Pamlico CC	200				
Montgomery CC	661				
Bladen CC	707				
Tri-county CC	721				
Anson CC	743				
McDowell CC	876			4	0
Martin CC	882	10	50	15	53
Roanoke-Chowan CC	935	1	100		
	1,000-1,999				
James Sprunt CC	1,061	2	100		
Brunswick CC	1,093			2	100
Mayland CC	1,196				
Halifax CC	1,263	4	50	9	44
Piedmont CC	1,294				
Carteret CC	1,304			9	78
Sampson CC	1,309				
Southwestern CC	1,355			4	25
Nash CC	1,361	30	70	45	44
Wilson TCC	1,381	2	100		
College of the Albemarle	1,435	13	62	26	54
Southeastern CC	1,497	2	100	6	33
Cleveland CC	1,509				
Mitchell CC	1,510	5	20	6	67
Beaufort Co. CC	1,543				
Haywood CC	1,558	1	100	2	100
Stanly CC	1,588				
Blue Ridge CC	1,597			3	33
Richmond CC	1,615			1	0
Randolph CC	1,662	6	83	11	45
Rockingham CC	1,790	5	80	22	36
Edgecombe CC	1,860	33	55	10	50
Craven CC	1,934			6	50
Robeson CC	1,963	4	75	8	38
	2,000-2,999				
Isothermal CC	2,046	24	54	16	44
Caldwell CC & TI	2,119	16	75	15	47
Vance-Granville CC	2,133				
Davidson CC	2,255	25	76	86	65
Wayne CC	2,441			8	25
Wilkes CC	2,463	5	80	20	65
Surry CC	2,473	3	67	5	60
Western Piedmont CC	2,500	6	33	5	80
Lenoir CC	2,503	42	64	51	55
Rowan-Cabarrus CC	2,669	80	45	35	29
Johnston CC	2,682	10	40	18	33
Cape Fear CC	2,822			16	13
Sandhills CC	2,875	12	42	18	44
Pitt CC	2,921	8	75	9	44
	3,000-4,999				
Catawba Valley CC	3,005	26	69	27	63
Gaston College	3,011				
Asheville-Buncombe TCC	3,082	18	83	27	70
Coastal Carolina CC	3,253	12	67	27	70
Alamance CC	3,316	11	73	34	56
Durham CC	3,457			5	100
Central Carolina CC	3,553			7	29
Forsyth TCC	4,187	5	100	26	58
	> 5,000				
Wake TCC	5,348	17	76	37	59
Guilford TCC	6,122	8	75	20	40
Fayetteville TCC	6,910	71	90	90	70
Central Piedmont CC	10,048	188	66	185	59

PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS

		COSMETOLOGY		VETERINARY MED. TECH.		AVIATION MAIN.		OPTICAL LAB.	
INSTITUTION	FTE	# TESTED	% PASS	# TESTED	% PASS	# TESTED	% PASS	# TESTED	% PASS
	< 1,000								
Pamlico CC	200								
Montgomery CC	661								
Bladen CC	707	18	33						
Tri-county CC	721								
Anson CC	743								
McDowell CC	876	9	89						
Martin CC	882	18	44						
Roanoke-Chowan CC	935	26	50						
	1,000-2,000								
James Sprunt CC	1,061	11	73						
Brunswick CC	1,093	20	80						
Mayland CC	1,196	17	88						
Halifax CC	1,263								
Piedmont CC	1,294	23	65						
Carteret CC	1,304	29	76						
Sampson CC	1,309	37	59						
Southwestern CC	1,355	20	90						
Nash CC	1,361	13	62						
Wilson TCC	1,381								
College of the Albemarle	1,435	6	33						
Southeastern CC	1,497	26	69						
Cleveland CC	1,509								
Mitchell CC	1,510								
Beaufort Co. CC	1,543	15	60						
Haywood CC	1,558	11	82						
Stanly CC	1,588	1	100						
Blue Ridge CC	1,597	21	62						
Richmond CC	1,615								
Randolph CC	1,662								
Rockingham CC	1,790	26	62						
Edgecombe CC	1,860	39	41						
Craven CC	1,934	14	86						
Robeson CC	1,963	54	67						
	2,000-2,999								
Isothermal CC	2,046	24	83						
Caldwell CC & TI	2,119	17	71						
Vance-Granville CC	2,133	63	43						
Davidson CC	2,255								
Wayne CC	2,441					83	96		
Wilkes CC	2,463								
Surry CC	2,473								
Western Piedmont CC	2,500								
Lenoir CC	2,503	51	47						
Rowan-Cabarrus CC	2,669								
Johnston CC	2,682	46	59						
Cape Fear CC	2,822								
Sandhills CC	2,875	41	59						
Pitt CC	2,921								
	3,000-4,999								
Catawba Valley CC	3,005								
Gaston College	3,011								
Asheville-Buncombe TCC	3,082								
Coastal Carolina CC	3,253	10	100						
Alamance CC	3,316								
Durham CC	3,457							15	80
Central Carolina CC	3,553	20	70	20	100				
Forsyth TCC	4,187								
	> 5,000								
Wake TCC	5,348								
Guilford TCC	6,122	41	78						
Fayetteville TCC	6,910								
Central Piedmont CC	10,048								

PASSING RATES ON LICENSING AND CERTIFICATION EXAMINATIONS

		DENTAL ASSISTING		DENTAL HYGIENE		MED. SONOGRAPHY		PHYSICAL THER.	
INSTITUTION	FTE	# TESTED	% PASS	# TESTED	% PASS	# TESTED	% PASS	# TESTED	% PASS
	< 1,000								
Pamlico CC	200								
Montgomery CC	661								
Bladen CC	707								
Tri-county CC	721								
Anson CC	743								
McDowell CC	876								
Martin CC	882							11	55
Roanoke-Chowan CC	935								
	1,000-1,999								
James Sprunt CC	1,061								
Brunswick CC	1,093								
Mayland CC	1,196								
Halifax CC	1,263								
Piedmont CC	1,294								
Carteret CC	1,304								
Sampson CC	1,309								
Southwestern CC	1,355								
Nash CC	1,361							5	100
Wilson TCC	1,381								
College of the Albemarle	1,435								
Southeastern CC	1,497								
Cleveland CC	1,509								
Mitchell CC	1,510								
Beaufort Co. CC	1,543								
Haywood CC	1,558								
Stanly CC	1,588								
Blue Ridge CC	1,597								
Richmond CC	1,615								
Randolph CC	1,662								
Rockingham CC	1,790								
Edgecombe CC	1,860								
Craven CC	1,934								
Robeson CC	1,963								
	2,000-2,999								
Isothermal CC	2,046								
Caldwell CC & TI	2,119					9	67		
Vance-Granville CC	2,133								
Davidson CC	2,255								
Wayne CC	2,441	15	80	16	100				
Wilkes CC	2,463								
Surry CC	2,473								
Western Piedmont CC	2500	14	64						
Lenoir CC	2,503								
Rowan-Cabarrus CC	2669	17	82						
Johnston CC	2,682								
Cape Fear CC	2,822								
Sandhills CC	2,875								
Pitt CC	2,921					11	54		
	3,000-3,999								
Catawba Valley CC	3,005								
Gaston College	3,011								
Asheville-Buncombe TCC	3,082	11	100	17	88				
Coastal Carolina CC	3,253	17	82	14	100				
Alamance CC	3,316	12	58						
Durham CC	3,457								
Central Carolina CC	3,553								
Forsyth TCC	4,187								
	> 5,000								
Wake TCC	5,348								
Guilford TCC	6,122	20	80	27	96				
Fayetteville TCC	6,910	43	77	13	85			11	100
Central Piedmont CC	10,048	10	50	23	100			18	100

QUALITY MEASURE F: Currentness of Equipment

Background

If colleges are to prepare students for the increasingly complex technological demands of the workplace, equipment that is appropriate to the skills students need to develop must be made available. It is not possible to adequately prepare workers for 21st Century jobs using 20th Century technology. A key component of fostering a "culture of quality" at community college institutions is the availability of equipment that is appropriate to the skills being taught.

Manufacturing today is very different from a decade ago, involving more automated processes that are computer driven. Today's worker must be skilled in this new technology if the needs of business and industry are to be met.

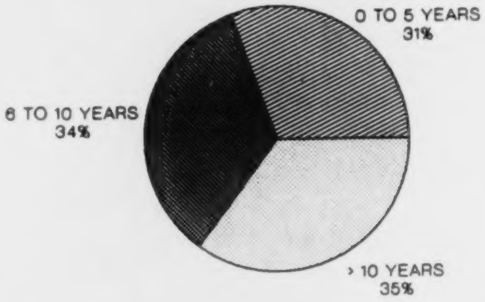
To assess the availability of appropriate equipment in the community college system, data were examined on the age of equipment in use in the system. The assumption underlying this analysis is that the development of skills needed in today's workplace requires experience with and knowledge of equipment that is current and up-to-date.

Implications

Data were collected on the age of equipment currently in use in the community college system. As can be seen from the pie chart below, 69 percent of all equipment currently in use in the system is greater than five years old, and 34 percent of that equipment is more than ten years old. This compares with data obtained in 1991 which indicated that 66 percent of all equipment was greater than five years old. It can be seen from this comparison that equipment is aging at a faster rate than new equipment is being purchased. This information, coupled with the fact that 95 percent of the equipment has a depreciating life of five to seven years, suggests that an unacceptably high proportion of the equipment being used for training in the system is either obsolete or on the verge of obsolescence.

Data

AGE OF EQUIPMENT



Source: Equipment Database, DCC
Contact: Eugene Hinton

Recommendation

This measure should continue to be developed and refined. Future development should focus not just on the age of the equipment, but on the match between the equipment being used in training and the skills needed by workers in the various occupations.

QUALITY MEASURE G: Percent of Libraries Meeting American College and Research Library Standards for Community, Junior and Technical Colleges

Background

Like current equipment, up-to-date libraries or learning resource centers are a key measure of the health of educational institutions. They provide the resources needed by students of all levels in the pursuit of education to support their classroom efforts.

The Association of College and Research Libraries (ACRL) has adopted standards for learning resource centers at community, junior and technical colleges. Based on an institution's full-time equivalent (FTE) enrollment, the standards establish "minimum" and "excellent" levels for various areas of the learning resource centers (e.g., staff, collections, budget). In effect, ACRL has established a "yardstick" by which an institution, or a system, can measure the adequacy of its library resources.

Using the ACRL standards, data on the system libraries were collected and analyzed. The purpose of the analysis was to determine what percent of the institutions meet the ACRL standards at either the "minimum" or "excellent" level. Only those factors in the standards for which data were readily available were included in the analysis. Data related to services are not now available and therefore were not included in this analysis.

Implications

Data on library operating expenditures, serial holdings, book collection size, library staff, and square footage of facilities were collected on each college. This information was compared with the "minimum" and "excellent" levels defined by ACRL for each measure. It is important to note that different levels are specified for each measure depending on the FTE of the college. In conducting the analysis, colleges were matched with the levels specified for their FTE. Though the standards do not differentiate between FTE and curriculum FTE, such a differentiation was made in this analysis. That is, our colleges were matched with the FTE level for each measure based on their curriculum FTE, not total FTE. The result of this approach is to make the most favorable judgement of our library resources, since in fact our learning resource centers must also serve the non-curriculum students.

The data indicate that the majority of the system's libraries do not meet the "minimum" levels specified by ACRL. In the area of expenditures per FTE, only four colleges met the minimum level, with one college meeting the excellent level. In only two cases did a library meet the "excellent" level for any one measure. It appears, based on this information, that the system libraries are in great need of upgrading. It should also be noted that if full FTE had been used in the analysis instead of using curriculum FTE, the results would have been even more dismal.

Data

LEARNING RESOURCE CENTERS: COMPLIANCE WITH ACRL STANDARDS

MEASURE	BELOW STANDARD		MINIMUM LEVEL		EXCELLENT LEVEL	
	#	%	#	%	#	%
# of Book Titles	44	76	13	22	1	2
Serial Subscriptions	38	66	20	34	0	0
Expenditure per FTE Minus Salaries	53	91	4	7	1	2
Library Staff	44	76	14	24	0	0
Square Footage	57	98	1	2	0	0

Source: Planning and Research Unit, DCC

Data: Statistical Abstract of Higher Education in North Carolina

Contact: Paul Nagy

Recommendation

This measure should continue to be refined. Data on the number of services provided by each college's learning resource center should be collected. The appropriateness of the facilities measure (square footage of library) should be closely examined to determine its usefulness in assessing the quality of the system's libraries.

QUALITY MEASURE H: **Number of Students Moving From One Level of Literacy to Another Level of Literacy**

Background

In literacy programs, as in all community college programs, the number of people who complete a program is not a real indicator of the education being provided. Since it is not a compulsory system, people are free to come and go as their life circumstances or interests motivate them. However, they may benefit greatly from the classes they do attend and complete. Many of the people who most need literacy classes have not experienced success in school and have fears to overcome before they are willing to attend regularly. Moving from illiteracy to a high school level education is a long and arduous process that takes a great deal of commitment.

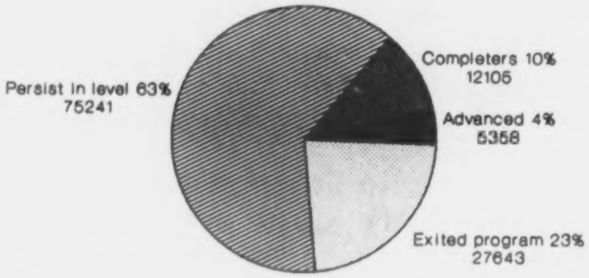
In literacy programs, students are often pressured by lack of money, other demands on their time and by other barriers to continuing their educations. In spite of the barriers, many adults do enroll for long enough periods of time to raise grade level abilities in reading, math and other skills, but still do not complete the entire program. With the testing programs put in place in the last few years, and with the student progress monitoring system, these gains will be measurable and will indicate real impacts of the literacy programs.

Implications

Data collected through the Literacy Education Information System (LEIS) on student progress in literacy is presented in the pie chart below. As can be seen from the chart, 4 percent of all literacy students in 1990-91 advanced from the level of literacy that they entered to the next level of literacy and were still enrolled in the program; 10 percent (12,105) of the literacy students completed the program they were in and exited the program. Of the 12,105 literacy students who completed a level of literacy and exited, 7,970 had completed all levels of literacy. If these students are removed from the analysis and the percent of students who advance to the next level is calculated based only on those students who had not completed the highest level of literacy, then the percent who advance to next level increases to 5 percent.

Data

PERSISTENCE OF LITERACY STUDENTS
ENROLLMENT: 120,347



Source: Annual Literacy Report, DCC
Contact: Terry Shelwood

Recommendation

Refinements in the analysis of data provided by the LEIS should continue. Efforts should be made to determine the level of literacy achieved by completers who exited the program.

QUALITY MEASURE I: Performance of Transfers After Two Semesters

Background

The primary aim of community college transfer programs is to provide educational experiences that will enable transfer students to make the transition to a baccalaureate program and perform as well as the students who start out at the receiving institution.

Technical and vocational programs are not designed to qualify students for transfer. However, programs such as Associate Degree Nursing and Engineering Technology allow students to concentrate on practical courses in the first two years and to complete the complementary portion of their programs later. Often, this enables the student to work in the field while getting his or her baccalaureate. It also may accommodate students who do not think they want to get a baccalaureate until after they have had some success in the early portion of the program. This type of program is likely to become more popular, especially as more working adults decide they want a baccalaureate.

The data on academic standing are available only for students who first enrolled at the university during the summer or fall semester. This may exclude many community college transfers. Colleges which do not offer college transfer programs transfer students with certain technical and/or general education credits. These colleges may also be involved in a contractual program in which a senior college provides general education programs to the community college students. Students in some contractual programs while at the community college are not included in the data because the university involved in the contractual program considered them native students and not college transfer students. In addition the data is reported separately for students who transferred from community colleges with an approved college transfer program and from those without. Changes in the data being reported on community college transfers have already been made and some new data will be available in 1992.

Implications

The data show that after two semesters, community college students perform very well as measured both by academic standing and grades, and that their performance has improved markedly over the last five years. Data comparing community college transfers with native students are not available.

It should be noted that since the data are for performance after two semesters and most transfers still need at least four semesters to graduate, few can have been expected to appear as graduates in this data.

Data

ACADEMIC STANDING OF TRANSFER STUDENTS FROM COMMUNITY COLLEGES OFFERING PRE-BACCALAUREATE PROGRAMS, AFTER TWO SEMESTERS, END OF YEAR MEASURES

		PERCENT OF STUDENTS* WHOSE STANDING IS:				
	NUMBER	GOOD	PROBATION	SUSPEND.	WITH-DREW	GRAD.
1986-87	1,741	71.9	10.2	5.3	10.3	2.3
1987-88	1,897	70.6	10.8	5.7	11.6	1.3
1988-89	1,984	75.2	10.0	4.8	9.3	0.8
1989-90	2,326	78.5	8.4	3.7	8.6	0.8
1990-91	2,573	80.6	6.6	5.1	7.2	0.4

*Numbers do not add to 100 percent due to rounding.

ACADEMIC STANDING OF TRANSFER STUDENTS FROM COMMUNITY COLLEGES NOT OFFERING PRE-BACCALAUREATE PROGRAMS, AFTER TWO SEMESTERS, END OF YEAR MEASURES

		PERCENT OF STUDENTS* WHOSE STANDING IS:				
	NUMBER	GOOD	PROBATION	SUSPEND.	WITH-DREW	GRAD.
1986-87	591	72.1	8.5	5.1	14.4	0.0
1987-88	524	68.9	6.1	5.3	19.3	0.4
1988-89	569	80.3	3.7	5.1	10.4	0.5
1989-90	536	76.9	6.2	7.1	9.9	0.0
1990-91	615	78.4	4.4	5.4	11.9	0.0

*Numbers do not add to 100 percent due to rounding.

TRANSFERS' FALL AND END OF YEAR G.P.A., COMMUNITY COLLEGES OFFERING PRE-BACCALAUREATE DEGREE PROGRAMS

YEAR	NUMBER	FALL GPA	END OF YEAR GPA
1986-87	1,741	2.48	2.54
1987-88	1,897	2.53	2.56
1988-89	1,984	2.56	2.56
1989-90	2,326	2.59	2.59
1990-91	2,573	2.56	2.57

TRANSFERS' FALL AND END OF YEAR G.P.A., COMMUNITY COLLEGES NOT OFFERING PRE-BACCALAUREATE DEGREE PROGRAMS

YEAR	NUMBER	FALL GPA	END OF YEAR GPA
1986-87	591	2.53	2.61
1987-88	524	2.48	2.60
1988-89	569	2.66	2.73
1989-90	536	2.50	2.58
1990-91	615	2.56	2.59

Source: UNC General Administration.

Frequency: Annual.

Scope: System and institution data.

Contact: Diana Haywood, UNC General Administration.

ACADEMIC STANDING OF TRANSFER STUDENTS FROM COMMUNITY COLLEGES

PERCENT OF STUDENTS WHOSE STANDING IS:

Institution	FTE	NUMBER	GOOD	PROBATION	SUSPEND	WITH-DREW	GRAD
	< 1,000						
Pamlico CC *	200	****	****	****	****	****	****
Montgomery CC	661	****	****	****	****	****	****
Bladen CC *	707	16	68.8	6.3	6.3	18.8	0.0
Tri-County CC	721	24	70.8	0.0	29.2	0.0	0.0
Anson CC	743	3	0.0	33.3	66.7	0.0	0.0
McDowell TCC	876	22	77.3	13.6	0.0	9.1	0.0
Martin CC	882	16	68.8	6.3	18.8	6.3	0.0
Roanoke-Chowan CC *	935	13	84.6	0.0	0.0	15.4	0.0
	1,000-1,999						
James Sprunt CC	1,061	16	75.0	6.3	12.5	6.3	0.0
Brunswick CC *	1,093	13	69.2	0.0	15.4	15.4	0.0
Mayland CC	1,196	13	69.2	15.4	0.0	15.4	0.0
Halifax CC	1,263	12	58.3	16.7	16.7	8.3	0.0
Piedmont CC *	1,294	5	80.0	20.0	0.0	0.0	0.0
Carteret CC *	1,304						
Sampson CC *	1,309	15	40.0	20.0	0.0	40.0	0.0
Southwestern CC	1,355	53	75.5	0.0	13.2	11.3	0.0
Nash CC	1,361	17	64.7	0.0	23.5	11.8	0.0
Wilson CC	1,381	12	83.3	8.3	0.0	8.3	0.0
College of the Albemarle	1,435	86	81.4	2.3	5.8	9.3	1.2
Southeastern CC	1,497	77	75.3	5.2	9.1	10.4	0.0
Cleveland CC	1,509	18	66.7	11.1	11.1	11.1	0.0
Mitchell CC	1,510	59	86.4	6.8	0.0	6.8	0.0
Beaufort Co. CC	1,543	32	81.3	6.3	3.1	9.4	0.0
Haywood CC *	1,558	21	85.7	9.5	4.8	0.0	0.0
Stanly CC *	1,588	27	81.5	3.7	3.7	11.1	0.0
Blue Ridge CC	1,597	27	74.1	3.7	3.7	18.5	0.0
Richmond CC	1,615	27	66.7	18.5	0.0	14.8	0.0
Randolph CC *	1,662	31	100.0	0.0	0.0	0.0	0.0
Rockingham CC	1,790	81	85.2	8.6	2.5	3.7	0.0
Edgecombe CC	1,860	10	70.0	10.0	0.0	20.0	0.0
Craven CC	1,934	52	80.8	5.8	7.7	5.8	0.0
Robeson CC	1,963	47	78.7	2.1	0.0	19.1	0.0
	2,000-2,999						
Isothermal CC	2,046	47	85.1	10.6	0.0	4.3	0.0
Caldwell CC	2,119	79	84.8	10.1	1.3	3.8	0.0
Vance-Granville CC	2,133	33	69.7	9.1	12.1	9.1	0.0
Davidson CC	2,255	113	77.0	8.0	5.3	9.7	0.0
Wayne CC	2,441	77	79.2	3.9	3.9	11.7	1.3
Wilkes CC	2,463	102	78.4	16.7	2.0	2.0	1.0
Surry CC	2,473	93	84.9	7.5	2.2	4.3	1.1
Western Piedmont CC	2,500	90	75.6	14.4	2.2	7.8	0.0
Lenoir CC	2,503	73	82.2	4.1	6.8	6.8	0.0
Rowan-Cabarrus CC	2,669	13	76.9	7.7	15.4	0.0	0.0
Johnston CC *	2,682	11	90.9	0.0	9.1	0.0	0.0
Cape Fear CC	2,822	110	70.0	3.6	12.7	13.6	0.0
Sandhills CC	2,875	161	75.2	4.3	9.9	9.9	0.6
Pitt CC	2,921	90	73.3	5.6	12.2	7.8	1.1
	3,000-4,999						
Catawba Valley CC	3,005	42	95.2	4.8	0.0	0.0	0.0
Gaston CC	3,011	101	80.2	8.9	4.0	6.9	0.0
Asheville-Buncombe TCC	3,082	101	74.3	5.0	5.0	15.8	0.0
Coastal Carolina CC	3,253	118	75.4	4.2	6.8	13.6	0.0
Alamance CC *	3,316	25	92.0	4.0	0.0	4.0	0.0
Durham CC	3,457	74	85.1	4.1	2.7	5.4	2.7
Central Carolina CC *	3,553	22	77.3	0.0	9.1	13.6	0.0
Forsyth CC	4,187	53	90.6	0.0	3.8	3.8	1.9
	> 5,000						
Wake CC	5,348	33	87.9	6.1	6.1	0.0	0.0
Guilford CC	6,122	214	89.7	3.7	2.8	3.7	0.0
Fayetteville CC	6,910	123	82.1	3.3	0.8	13.8	0.0
Central Piedmont CC	10,048	345	84.9	6.7	2.9	4.9	0.6

*Does not offer pre-baccalaureate program

TRANSFERS' FALL AND END OF YEAR GPA

INSTITUTION	FTE	NUMBER	FALL GPA	END OF YEAR GPA
	< 1,000			
Pamlico CC *	200	****	****	****
Montgomery CC	661	****	****	****
Bladen CC *	707	16	2.01	2.09
Tri-County CC	721	24	2.30	2.38
Anson CC	743	3	0.94	1.08
McDowell TCC	876	22	2.89	2.84
Martin CC	882	16	2.30	2.46
Roanoke-Chowan CC *	935	13	2.97	2.94
	1,000-1,999			
James Sprunt CC	1,061	16	2.15	2.38
Brunswick CC *	1,093	13	2.23	2.30
Mayland CC	1,196	13	2.57	2.75
Halifax CC	1,263	12	2.17	2.17
Piedmont CC *	1,294	5	1.98	1.92
Carteret CC *	1,304			
Sampson CC *	1,309	15	2.62	2.66
Southwestern CC	1,355	53	2.61	2.75
Nash CC	1,361	17	2.56	2.41
Wilson CC	1,381	12	2.56	2.52
College of the Albemarle	1,435	86	2.93	2.96
Southeastern CC	1,497	77	2.56	2.64
Cleveland CC	1,509	18	2.49	2.53
Mitchell CC	1,510	59	2.64	2.68
Beaufort Co. CC	1,543	32	2.60	2.71
Haywood CC *	1,558	21	2.78	2.80
Stanly CC *	1,588	27	2.47	2.49
Blue Ridge CC	1,597	27	2.70	2.75
Richmond CC	1,615	27	2.39	2.53
Randolph CC *	1,662	31	2.73	2.81
Rockingham CC	1,790	81	2.48	2.52
Edgecombe CC	1,860	10	2.39	2.10
Craven CC	1,934	52	2.53	2.53
Robeson CC	1,963	47	2.04	2.08
	2,000-2,999			
Isothermal CC	2,046	47	2.52	2.55
Caldwell CC	2,119	79	2.85	2.81
Vance-Granville CC	2,133	33	2.27	2.24
Davidson CC	2,255	113	2.42	2.41
Wayne CC	2,441	77	2.54	2.63
Wilkes CC	2,463	102	2.60	2.58
Surry CC	2,473	93	2.80	2.75
Western Piedmont CC	2,500	90	2.56	2.69
Lenoir CC	2,503	73	2.72	2.70
Rowan-Cabarrus CC	2,669	13	2.79	2.47
Johnston CC *	2,682	11	2.18	2.38
Cape Fear CC	2,822	110	2.26	2.27
Sandhills CC	2,875	161	2.26	2.36
Pitt CC	2,921	90	2.49	2.55
	3,000-4,999			
Catawba Valley CC	3,005	42	2.80	2.74
Gaston CC	3,011	101	2.51	2.46
Asheville-Buncombe TCC	3,082	101	2.76	2.83
Coastal Carolina CC	3,253	118	2.59	2.63
Alamance CC *	3,316	25	2.73	2.61
Durham CC	3,457	74	2.50	2.46
Central Carolina CC *	3,553	22	2.83	2.71
Forsyth CC	4,187	53	2.74	2.76
	> 5,000			
Wake CC	5,348	33	2.64	2.60
Guilford CC	6,122	214	2.38	2.42
Fayetteville CC	6,910	123	2.91	2.92
Central Piedmont CC	10,048	345	2.64	2.50

Recommendation

Data on performance of native students should be used to compare the performance of community college transfer students. The availability of data differentiating students from technical programs and from pre-baccalaureate programs should be investigated. Data on the performance of community college transfers to non-UNC institutions should also be investigated. The UNC-General Administration and Department of Community Colleges should continue to examine the transfer issues as part of their current study. A common definition of what constitutes a transfer student should be developed.

CRITICAL SUCCESS FACTOR II: ACCESS

At the core of the community college system's mission is its open door policy. Community colleges "take people from where they are to where they want to be" in the words of founding father Dallas Herring. The special mission of community colleges is to serve those who did not have opportunities to learn or who missed out on those opportunities, and to serve people who have special problems to overcome. Thus, there is an emphasis on reaching out to the underserved: dropouts, handicapped, economically or educationally disadvantaged and other groups who are not traditionally included in higher education.

There are many issues facing community colleges today, but perhaps none strike at the core of our mission as hard as does the reality of limited resources in this time of economic uncertainty. How long can the "open door" remain open when classes are filled to overflowing. As the demand for services continues to rise without a corresponding increase in resources, the "open door" that is the path to opportunity for so many closes just a little bit more.

The Commission on the Future stressed the importance to the state of bringing underserved groups into education. The state needs to raise the productivity of its citizens, and these are times in which people have a harder time being self-sufficient and raising families unless they have an education. Providing access to education, a constitutional duty of the state in North Carolina, is more and more important to individuals and to society. A successful community college system will be reaching out to underserved groups.

The measures selected to indicate how well the community college system is performing this role are:

A. Enrollment of High School Dropouts; Handicapped; Disadvantaged; Single Parents; Nontraditional High School Diploma Earners; Inmates

B. Number Served by Type Through Literacy Programs and Percent of Target Population Served

C. Number of GEDs and Adult High School Diplomas Awarded Compared to the Number of Dropouts Statewide

D. Number and Percent of Dropouts Annually Who are Served by Literacy Programs

E. Percent of Students Receiving Financial Aid and Amount of Aid Compared With Cost of Attendance

F. Number of Students Moving From Literacy to Some Other College Program

G. Percent of Population in Service Area Enrolled

ACCESS MEASURE A: **Enrollment of High School Dropouts; Handicapped; Disadvantaged; Single Parents; Nontraditional High School Diploma Earners; Inmates**

Background

The degree to which education is being delivered to the groups which need additional opportunities is a direct way to measure access. A simple accounting of the numbers of students with particular characteristics and/or needs is one such indicator.

In the fall of 1989, the system began to collect data on these target groups enrolled in all programs. Colleges have been required to report in these categories for programs supported by the Vocational Education Act. Data about enrollees in literacy programs also have been collected because of the federal funding of those programs. The data shown here therefore, apply only to the literacy programs and programs funded by the federal Vocational Education Act. They do not include all community college students, and are therefore not generalizable. Definitions of the categories are given with the data.

It should be noted that prior to 1989-90, students could not be enrolled in literacy programs if they already possessed a high school diploma. Therefore, the total enrollment of these programs could be considered to be high school dropouts. Since the policy change in 1989-90, it is not possible to tell how many high school dropouts enrolled in literacy. This problem should be solved in the future with data being collected with the Literacy Education Information System.

It should also be noted that it is not legal to require students to supply information that would categorize them (as handicapped or economically disadvantaged, etc.) though they may be requested to supply such information.

Implications

Community colleges are serving target groups in literacy and vocational programs funded with federal dollars. However, because the data are reported only on those students who are directly benefiting from the federal funds, the data are not inclusive and therefore have uncertain value as an indicator for all community college enrollments. The voluntary nature of the data also makes it suspect, especially for economically disadvantaged and handicapped. Measure B provides more insight into the literacy programs' service to the target groups.

The large increase in the number of public assistance recipients enrolled in the literacy program in 1989-90 may have been the result of the implementation of the new welfare program, JOBS. At this point it is not known why the number of public assistance recipients served dropped by such a large number in 1990-91. It may be a problem related to data entry and the new Literacy Education Information System.

Data

SYSTEM LEVEL ENROLLMENTS IN THE LITERACY PROGRAM

HIGH SCHOOL DROPOUTS	1986-87	92,244
	1987-88	96,625
	1988-89	104,785
HANDICAPPED	1987-88	7,420
	1988-89	7,915
	1989-90	14,487
	1990-91	23,035
MENTALLY RETARDED ADULTS	1987-88	7,989
	1988-89	7,805
	1989-90	8,391
	1990-91	8,147
PUBLIC ASSISTANCE RECIPIENTS	1987-88	11,038
	1988-89	11,324
	1989-90	14,825
	1990-91	8,081
HOMELESS	1990-91	1,728
INMATES	1987-88	11,489
	1988-89	10,130
	1989-90	10,048
	1990-91	8,093

Definitions:

HIGH SCHOOL DROPOUT, a student who leaves a school for any reason except death, before graduation or completion of a program of study, and without transferring to another school.

HANDICAPPED, persons who are sixteen years of age and older with any type of physical or mental impairment that substantially limits or restricts one or more major life activities, including walking, seeing, hearing, speaking learning, and working. This definition includes adults who are alcohol and drug abusers, mentally retarded, hearing-impaired, deaf, speech-impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, other health impairments, and adults with specific learning disabilities.

MENTALLY RETARDED ADULTS, adults with documented metal retardation who may benefit from the program. These adults may not have attended public school, attended on a limited basis, or who simply need additional educational opportunities after leaving public school.

PUBLIC ASSISTANCE RECIPIENTS, adults who receive financial assistance from Federal, State, and/or local programs, such as Aid For Dependent Children, old-age assistance, general assistance, and aid to the blind or totally disabled. Social Security recipients should not be included in this category unless they are receiving old-age assistance.

INMATES, adults who are inmates in any prison, jail reformatory, work farm, detention center, or halfway house, community-based rehabilitation center, or any other similar Federal, State or local institution designed for the confinement or rehabilitation of criminal offenders.

Source: Annual Performance Report for Literacy Programs.

Frequency: Annual. Published every summer.

Scope: System and institutional data.

Contact: Terry Shelwood, Student Development Services, DCC.

SYSTEM LEVEL ENROLLMENTS IN THE VOCATIONAL EDUCATION PROGRAM - STUDENTS ASSISTED WITH CARL PERKINS FUNDS

HANDICAPPED	1986-87	8,029
	1987-88	6,160
	1988-89	6,553
	1989-90	9,242
	1990-91	6,730
DISADVANTAGED	1986-87	40,284
	1987-88	44,356
	1988-89	43,293
	1989-90	59,876
	1990-91	48,772
LIMITED ENGLISH PROFICIENCY	1986-87	4,305
	1987-88	3,605
	1988-89	3,410
	1989-90	3,674
	1990-91	2,499
CORRECTIONS	1986-87	1,479
	1987-88	2,273
	1988-89	1,267
	1989-90	1,524
	1990-91	2,282

Definitions:

HANDICAPPED, when applied to individuals, means individuals who are mentally retarded, hard of hearing, deaf, speech or language impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, other health impaired, deaf-blind, multi-handicapped, or persons with specific learning disabilities, who by reason thereof require special education and related services, and who because of their handicapping condition, cannot succeed in the regular vocational education program without special education assistance.

DISADVANTAGED means individuals (other than handicapped individuals) who have economic or academic disadvantages and who require special services and assistance in order to enable them to succeed in vocational education programs. The term includes individuals who are members of economically disadvantaged families, migrants, individuals who have limited English proficiency and individuals who are dropouts from, or who are identified as potential dropouts from, secondary school.

LIMITED ENGLISH PROFICIENCY, when used with reference to individuals, means individuals - (1) Who were not born in the United States or whose native language is a language other than English; (1.b) Who came from environments where a language other than English is dominant; or (1.c) Who are American Indian and Alaskan Native students and who come from environments where a language other than English has had a significant impact on their level of English language proficiency; and (2) Who by reason thereof, have sufficient difficulty speaking, reading, writing, or understanding the English language to deny those individuals the opportunity to learn successfully in classrooms where the language of instruction is English or to participate fully in our society.

CORRECTIONS (CRIMINAL OFFENDER), means any individual who is charged with or convicted of any criminal offense, including a youth offender or a juvenile offender.

Source: Annual Performance Report for the Vocational Education State-Administered Program

Frequency: Annual.

Scope: State level data.

Contact: J.W. Eades, Coordinator of Vocational Education, DCC.

Recommendation

The revised data collection processes that went into effect in the fall of 1989 should provide better data for target group enrollment in the future. It will take some experience with these data to understand how well they measure the ability of the colleges to address the needs of the underserved. Where possible, data on the numbers of people in the target groups within the relevant population should also be shown. It may be possible to get new census data by zip code so that service areas can be analyzed. We hope the student progress monitoring system can help us track the transition of students into curriculum programs. Qualitative studies (i.e., focus groups) could give a good picture of how target groups are received on campus and what factors support their success.

ACCESS MEASURE B: Number Served by Type Through Literacy Programs and Percent of Target Population Served

Background

The underserved are especially likely to need literacy programs. This measure is intended to show to what extent the various types of literacy programs are providing services to the undereducated citizens who need them.

Enrollment in literacy programs is compared to the number in the target group, defined as the 1,738,084 adult North Carolinians, aged 16 or older and no longer enrolled in public schools, who have completed less than 12 grades of schooling. This figure comes from the 1980 census, and has undoubtedly changed. There especially may be far fewer people who lack an ***eighth grade*** education, since the oldest citizens are those who were more likely not to have had the opportunity to get through the twelve years that are now standard. We will soon have 1990 data on educational attainment, but the numbers without a ***high school diploma today***, are not likely to be substantially lower than in 1980 since the numbers of dropouts have continued to be high. In addition, this definition of the target group is an underestimate of those who need literacy programs since it does not include people who have spent years in school but whose skills do not measure up to the grade level they completed.

The implementation of the Literacy Education Information System has provided better information on literacy students. This system is allowing us to begin measuring student progress from grade level to grade level. Implementation of testing at entry and restructuring of the curriculum has laid the foundation for more comprehensive evaluation of the program.

Implications

Literacy programs have gradually increased penetration of the target population over the last five years. The one drop appears to have occured between 1986-87 and 1987-88. This drop, however, is likely due to changes in the reporting on literacy students. In 1988-89 a decision was made in Program Services to report learning lab students separately from literacy students. The rationale for this decision was that curriculum students could also be counted as learning lab students. The literacy data reported in previous critical success factors have been corrected to maintain consistency of the data. It should be noted that no data correction was possible for 1986-87.

There now exist several different reports that present literacy data on the system. Each report is developed according to specific guidelins and therefore may report the data differently. For example, one report focuses on the last literacy program in which a student was enrolled during the year. Whereas the total number of literacy students being served would not change, the numbers of students in each literacy category would, depending on when the report was generated.

In order to maintain consistency in the reporting of participation rates in literacy, data from the Annual Statistical Report published by the Department of Community Colleges is reported. This report is considered to be the official source of system statistics generated from institutional data sent by the colleges. As a result of changing to one standard data source, and the adjustments made due to learning lab students being reported separately from literacy students, the data for past years will not match previous critical success factors reports on this measure. A more valid comparison of the data from year to year should be possible by consistently using this one source of data.

Whereas the system data are duplicated across literacy categories, the available data on individual institutions was unduplicated and represented the **last** program in which a student was enrolled during 1990-91. The reporting of the data in this manner may make it difficult for some colleges to match the data presented in this report with their own data since it is likely that the data at the college level is duplicated across type. The total enrollment in literacy for 1990-91 should be the same as the total unduplicated headcount in literacy kept by the college.

Data

ADULT LITERACY PROGRAM ENROLLMENTS BY TYPE
(Duplicated Across Type)

YEAR	ABE	AHSP	GED	CED	TOTAL	% TARGET POP.
1986-87	55,526	18,962	14,982	6,502	95,972	5.5
1987-88	50,790	18,235	16,445	7,989	87,033	5.0
1988-89	56,066	17,517	21,632	8,508	96,680	5.6
1989-90	64,869	19,350	23,790	8,731	109,415	6.3
1990-91	73,535	20,667	25,726	8,436	120,043	6.9

ADULT LITERACY PROGRAM ENROLLMENTS BY TYPE

(Unduplicated Across Type)

INSTITUTION	FTE	ABE	AHS	CED	ESL	GED	TOTAL	% TARGET POP.
	< 1,000							
Pamlico CC	200	132	0	76	16	0	224	6.2
Montgomery CC	661	234	0	28	92	150	504	5.9
Bladen CC	707	348	0	39	0	69	456	4.2
Tri-County CC	721	381	0	45	10	0	436	3.5
Anson CC	743	782	2	23	86	75	968	5.0
McDowell TCC	876	592	0	206	23	71	892	6.9
Martin CC	882	825	31	57	1	177	1,091	6.1
Roanoke-Chowan CC	935	628	0	105	0	65	798	4.8
	1,000-1,999							
James Sprunt CC	1,061	639	0	85	143	19	886	3.9
Brunswick CC	1,093	91	0	73	43	340	547	4.8
Mayland CC	1,196	886	0	114	272	93	1,365	8.4
Halifax CC	1,263	1,275	12	32	0	28	1,347	4.7
Piedmont CC	1,294	672	345	58	46	343	1,464	7.9
Carteret CC	1,304	290	189	119	20	237	855	7.1
Sampson CC	1,309	636	60	151	224	136	1,207	7.0
Southwestern CC	1,355	789	0	81	17	100	987	5.5
Nash CC	1,361	1,159	234	48	637	113	2,191	9.9
Wilson CC	1,381	1,144	70	111	124	317	1,766	8.4
College of the Albemarle	1,435	797	24	75	65	418	1,379	4.7
Southeastern CC	1,497	587	284	107	84	99	1,161	6.4
Cleveland CC	1,509	374	864	94	43	212	1,587	5.5
Mitchell CC	1,510	1,018	0	115	204	224	1,561	5.6
Beaufort Co. CC	1,543	506	0	137	208	325	1,176	7.0
Haywood CC	1,558	235	0	99	55	242	631	4.0
Stanly CC	1,588	1,066	628	94	126	82	1,996	7.1
Blue Ridge CC	1,597	428	0	145	200	713	1,486	6.5
Richmond CC	1,615	2,351	193	156	0	324	3,024	11.5
Randolph CC	1,662	798	227	83	162	748	2,018	6.0
Rockingham CC	1,790	768	184	70	74	490	1,586	5.0
Edgecombe CC	1,860	1,210	256	74	39	915	2,494	12.7
Craven CC	1,934	277	0	152	106	846	1,381	7.9
Robeson CC	1,963	434	1,404	99	0	49	1,986	5.8
	2,000-2,999							
Isothermal CC	2,046	770	801	157	0	372	2,100	8.7
Caldwell CC	2,119	1,312	1,124	73	0	31	2,540	7.7
Vance-Granville CC	2,133	1,044	34	85	103	706	1,972	4.8
Davidson CC	2,255	656	970	101	72	567	2,366	4.9
Wayne CC	2,441	1,393	578	112	95	161	2,339	9.0
Wilkes CC	2,463	553	393	175	320	155	1,596	4.5
Surry CC	2,473	682	0	117	0	977	1,776	5.0
Western Piedmont CC	2,500	797	180	335	72	862	2,246	8.3
Lenoir CC	2,503	1,542	18	501	301	364	2,726	9.7
Rowan-Cabarrus CC	2,669	820	1,127	256	42	144	2,389	3.7
Johnston CC	2,682	422	621	95	220	53	1,411	5.7
Cape Fear CC	2,822	597	516	115	315	223	1,766	5.5
Sandhills CC	2,875	606	0	137	205	689	1,637	7.8
Pitt CC	2,921	1,007	64	73	198	442	1,784	7.9
	3,000-4,999							
Catawba Valley CC	3,005	1569	8	151	379	639	2,746	6.3
Gaston CC	3,011	2,828	0	57	62	431	3,378	4.5
Asheville-Buncombe TCC	3,082	782	53	225	153	1,697	2,910	5.5
Coastal Carolina CC	3,253	1,818	113	63	217	752	2,963	13.2
Alamance CC	3,316	1,513	311	295	216	339	2,674	8.6
Durham CC	3,457	1,554	1,085	344	1,403	236	4,622	9.9
Central Carolina CC	3,553	2,138	611	218	927	209	4,103	9.9
Forsyth CC	4,187	897	505	274	368	1,340	3,384	4.7
	> 5,000							
Wake CC	5,348	3,994	317	190	1,881	999	7,381	13.6
Guilford CC	6,122	2,392	758	453	561	639	4,803	6.2
Fayetteville CC	6,910	2,743	1,486	252	798	118	5,397	11.7
Central Piedmont CC	10,048	1,936	2,399	342	445	462	5,584	6.6

Definitions:

ADULT BASIC EDUCATION (ABE)-- a program of basic skills for adults, 16 or older, who are no longer enrolled in high school and score at 8.9 or below on tests approved by the Department of Community Colleges. This includes English as a Second Language students.

ADULT HIGH SCHOOL PROGRAM (AHSP)-- a program of instruction designed to help adult students earn a high school diploma.

GENERAL EDUCATIONAL DEVELOPMENT (GED)-- a program of instruction designed to prepare adult students to pass the GED tests in order to qualify for a high school equivalency diploma.

COMPENSATORY EDUCATION (CED)--a program to provide services to those mentally retarded adults who have not had an education or who received an inadequate one.

Source: Annual Statistical Report, 1990-91.

Frequency: Annual.

Scope: System level and institution data.

Contact: Steve Ijames, Research and Information Services, DCC

Recommendation

The student progress monitoring system should be fully implemented as soon as possible. The data that results from this system will allow for a more comprehensive tracking of literacy students.

ACCESS MEASURE C: Number of GEDs (General Educational Development) and Adult High School Diplomas (AHSD) Awarded Compared to the Number of Dropouts Statewide

Background

The great majority of people in North Carolina's workforce are people who are well out of high school. Reducing the numbers of dropouts will result in raising the educational levels of the workforce, but only gradually. If the educational levels of the workforce are to be significantly affected in the short run, more mature people will also have to be attracted back into educational programs.

This measure reflects the net impact of GED/AHSD programs on the percent of population without high school credentials. It does not show how many of last year's (or any year's) dropouts came back to get a diploma in a community college. (That is the intent of Access Measure D.) This measure shows how many people of whatever ages come back to get their diplomas compared to the number of dropouts in any given year. The number of adults without these credentials is reduced only in two other ways: by their dying or moving out of North Carolina.

Ideally, we would like to see the numbers of dropouts continue to go down at the same time that the numbers of GEDs and AHSDs are raised. That would be attacking the problem at both ends!

There are also problems in the collection of data. For example, students who go directly out of high school to an AHSD or GED program are frequently counted as transfers, not dropouts. A comprehensive study of student flow is needed to completely understand this problem.

Implications

While the numbers of dropouts have gone down, so have the number of people in the high school age groups. The numbers of GEDs and AHSDs awarded reached a peak in 1986-87 and dropped in 1987-88, probably because of changes in the programs. A writing sample was added to the GED exam, and the price of the exam was raised to cover the cost of grading it. In addition, 1986-87 was the last year that the GED was accepted by the military on the same basis as a diploma. Awards have risen in 1989-90, while the number in the dropout pool has decreased.

There was a dramatic decrease in the number of public school dropouts in 1990-91 and a significant increase in the number of GEDs and AHSDs awarded by the community colleges. The reason for the dramatic decline in the number of public school dropouts is not known but should be examined to determine if the number of students classified as transfers to the community colleges increased.

Data

NUMBER OF GEDs AND AHSDs AWARDED COMPARED TO THE NUMBER OF DROPOUTS STATEWIDE

YEAR	NEW DROPOUTS ADDED TO DROPOUT POOL	GED/AHS DIPLOMAS AWARDED	INCREASE IN DROPOUT POOL
1985-86	23,443	15,193	8,250
1986-87	22,813	19,599	3,214
1987-88	22,770	16,263	6,507
1988-89	24,367	14,460	9,907
1989-90	23,000	15,013	7,987
1990-91	19,417	16,606	2,811

Source: GED/AHS Files, DCC.

Frequency: Annual.

Scope: State and institution data.

Contact: Delane Boyer, Coordinator, GED & AHSD, DCC.

Source: Dropout Records, State Department of Public Instruction.

Frequency: Compiled annually. Available in winter.

Scope: State level and local district data.

Contact: Johnnie McLaughlin, North Carolina Department of Public Instruction.

Recommendation

This is a good measure which indicates a significant continuing need for improvement in the literacy program. A comprehensive study of practices and student flow is needed to completely understand this problem.

ACCESS MEASURE D: Number and Percent of Dropouts Annually Who are Served Literacy Programs

Background

It is not possible to tell from data currently kept at the state level how many students who dropped out in any given year return to a community college and complete their high school education. Whereas data are being gathered through the implementation of the Literacy Education Information System (LEIS) relative to this measure, the data are being kept at the local college level thus preventing any analysis at the system level. To address this measure, the data should be brought to the system level to allow for analysis, or programming instructions should be given to the colleges on how to conduct the analysis at the local level and the analysis then aggregated at the system level.

An accurate accounting of this data will also require an agreement with the Department of Public Instruction on the proper accounting of dropouts. With the new data provided by LEIS, we will be able to tell how well the community colleges are acting as a safety net for young people who leave public schools.

Recommendation

The appropriate programming for this measure should be developed in 1992. This is a valuable measure that will help North Carolina accurately portray the educational system that is in place to serve young people.

ACCESS MEASURE E: **Percent of Students Receiving Financial Aid and Amount of Aid Compared with Cost of Attendance**

Background

Financial need is a major barrier to participation in higher education, especially since a student not only has to pay the cost of tuition, fees, books, transportation and perhaps child care, but also gives up time that could be spent working to earn money. Without help, many students, particularly those with family responsibilities, cannot stay in school. The intent of this measure is to show how far financial aid goes in helping to overcome this barrier for the most needy people in the state.

In calculating the percent of students receiving financial aid, only curriculum students were examined since continuing education students and literacy students are not eligible for the types of financial aid for which data are available. Further, special credit students, co-op students, and dual enrollment students were omitted from the analysis since they also are not eligible for the types of financial aid for which data are available.

At this point a system measure on the average cost of attending a community college is being developed. Based on analyses conducted by Student Development Services, an estimated cost of attending four quarters ranges from $3,813 for students (non-nursing) living with parents and no dependents to $8,186 for students in the Associate Degree Nursing program with dependents. Refinement to the measure of cost of attending needs to continue.

Implications

The data show that the numbers of students receiving some aid have increased over the past several years as has the average dollar value of the aid. State and private sector scholarship funds have been a priority of the State Board of Community Colleges and have been increased. Tuition has significantly increased; other costs associated with attending a community college, including books, materials, transportation and child care, have also increased. However, the data do not show the percent of students in need who received aid nor whether the amount of aid was adequate.

Data

PERCENT OF NC COMMUNITY COLLEGE STUDENTS RECEIVING FINANCIAL AID *

YEAR	NUMBER OF CURRICULUM STUDENTS RECEIVING FINANCIAL AID	PERCENT OF CURRICULUM STUDENTS RECEIVING FINANCIAL AID	AVERAGE DOLLAR VALUE
1986-87	35,581	28.8	583.00
1987-88	33,481	26.8	650.00
1988-89	37,906	29.0	680.00
1989-90	43,465	31.8	720.00
1990-91	51,615	35.0	728.00

*Financial aid includes college work study, Pell grants, loans, scholarships, grants, and awards provided. For 1990-91 nursing awards and loans were included in the data.

Source: Statistical Abstract of Higher Education in North Carolina.

Frequency: Annual. Available in spring for the prior year.

Scope: State level and institution data.

Contact: UNC General Administration, Linda Balfour.

Recommendation

Compare percent of students receiving aid to percent of students who are economically disadvantaged, differentiate between loans and grants, and develop a way to say something about amount of aid compared to cost. A study should be undertaken to determine the impact of tuition increases on traditionally underserved students.

ACCESS MEASURE F: **Number of Students Moving from Literacy to Some Other Educational Program**

Background

Today's workforce needs more and more advanced skills. The basic skills once appropriate for many entry level jobs in industry are no longer adequate for the technological workplace. Basic skills no longer mean the ability to read, write and perform basic mathematics. Rather, basic skills in today's workplace include the ability to think creatively and critically, to exhibit problem-solving abilities, to have a foundation in scientific principles and to know how to keep on learning. Education for today's workplace must focus on preparing workers for the technology of tomorrow.

To meet the labor force demands of the next decade, efforts will have to be made to educate and train non-traditional students who have, in the past, been neglected. The literacy program offered by the community college system is one step in serving these students, but it is just the first step. To adequately meet the labor needs of the next decade, students must be taken beyond literacy and into other educational programs.

There are many reasons why literacy students do not continue their educations. Often they are pressured by financial constraints which can make part-time study necessary. They may not have flexible job schedules or may be pressured by family needs. Nevertheless, efforts must be made to assist students who successfully complete the literacy program move into other educational programs.

Data for this measure are collected from the Literacy Education Information System. Upon examination of the data for 1990-91 it became evident that the data were incomplete and, therefore, no data are being presented in this report. Efforts are underway to ensure that the data for 1991-92 will be available for the next critical success factors report.

Recommendation

Colleges should ensure that these data are entered annually into the LEIS database. The student progress monitoring system should be fully implemented in order to determine the success of students who move from literacy to some other education program.

ACCESS MEASURE G: Percent of Population in Service Area Enrolled

Background

The open door policy of the community college system was established to ensure educational opportunities for all adults in North Carolina. The wide range of educational programs offered and the geographic distribution of the colleges across the state should provide for maximum accessibility by the adult population.

One measure of the extent to which the system is addressing the educational needs of the state is the percent of the population in the service area enrolled. This measure reflects the accessibility of the programs, and to some degree the appropriateness of the programs. This measure does not, however, provide information on specific target groups being served. At any given college, other limitations may come into play. For example, colleges which have not been able to build new facilities or arrange suitable sharing or lease agreements cannot start classes for which there may be a strong community demand. Indeed, many colleges report that they are utilizing all availabe space on their campus and are still not able to meet student demands for classes.

The most important limitation on enrollment growth in the current environment is probably funds availability. Colleges have strong incentives to maximize enrollments, but budget reversions and lack of expansion funds ultimately force reductions in the numbers of classes which can be offered.

Implications

Enrollment data for each college (a total of both curriculum and extension headcount) were compared with the adult population of its service area. The percentages served by each college were then averaged to produce a result which can be thought of as the percent of the adult population of the service area enrolled in the typical community college. Since the community college system enrolls adults, only the population of the service area 18 years old or older was included in the analysis. At this point only three years of data are reportable.

Data

PERCENT OF ADULT POPULATION IN SERVICE AREA ENROLLED PER COLLEGE (STATE AVERAGE)

YEAR	% OF SERVICE AREA POPULATION ENROLLED (SYSTEM AVE. PER COLLEGE)
1988-89	14.3
1989-90	15.7
1990-91	16.0

Source: **Annual Enrollment Report.**

Contact: Steve Ijames, Research and Information Services, DCC

Recommendation

Efforts should be made to determine the extent to which reversions, budget reductions and tuition increases have affected enrollment by various target groups. In addition, data should be collected on the number of classes that had to be cancelled and on enrollment limits that had to be set due to recent reversions and budget reductions.

PERCENT OF ADULT POPULATION IN SERVICE AREA ENROLLED

INSTITUTION	FTE	% OF POP.
	< 1000	
Pamlico CC	200	19.4
Montgomery CC	661	19.7
Bladen CC	707	15.0
Tri-County CC	721	14.9
Anson CC	743	8.0
McDowell TCC	876	20.0
Martin CC	882	18.9
Roanoke-Chowan CC	935	12.1
	1,000-1,999	
James Sprunt CC	1,061	19.0
Brunswick CC	1,093	12.9
Mayland CC	1,196	17.4
Halifax CC	1,263	15.7
Piedmont CC	1,294	19.2
Carteret CC	1,304	19.1
Sampson CC	1,309	17.1
Southwestern CC	1,355	13.2
Nash CC	1,361	16.1
Wilson CC	1,381	20.0
College of the Albemarle	1,435	9.3
Southeastern CC	1,497	18.3
Cleveland CC	1,509	17.0
Mitchell CC	1,510	14.2
Beaufort Co. CC	1,543	16.1
Haywood CC	1,558	15.2
Stanly CC	1,588	10.4
Blue Ridge CC	1,597	13.0
Richmond CC	1,615	13.3
Randolph CC	1,662	11.9
Rockingham CC	1,790	14.5
Edgecombe CC	1,860	23.2
Craven CC	1,934	18.3
Robeson CC	1,963	16.5
	2,000-2,999	
Isothermal CC	2,046	21.3
Caldwell CC	2,119	16.0
Vance-Granville CC	2,133	11.3
Davidson CC	2,255	12.8
Wayne CC	2,441	15.8
Wilkes CC	2,463	15.4
Surry CC	2,473	16.1
Western Piedmont CC	2,500	25.5
Lenoir CC	2,503	19.7
Rowan-Cabarrus CC	2,669	11.1
Johnston CC	2,682	21.8
Cape Fear CC	2,822	16.1
Sandhills CC	2,875	23.4
Pitt CC	2,921	17.7
	3,000-4,999	
Catawba Valley CC	3,005	20.0
Gaston CC	3,011	12.6
Asheville-Buncombe TCC	3,082	12.4
Coastal Carolina CC	3,253	16.4
Alamance CC	3,316	19.8
Durham CC	3,457	11.0
Central Carolina CC	3,553	16.9
Forsyth CC	4,187	10.1
	> 5,000	
Wake CC	5,348	11.2
Guilford CC	6,122	13.3
Fayetteville CC	6,910	18.8
Central Piedmont CC	10,048	15.3

CRITICAL SUCCESS FACTOR III: EDUCATION CONTINUUM

The state's public schools, community colleges and universities are increasingly interdependent. Each part of the continuum has a function which is both vital to the education of North Carolinians and to the efficient and effective functioning of the others. To the extent that the sectors of education work together, each will be improved, and the people will benefit. Effective community college partnerships with the public schools are necessary to accomplish two major objectives:

1) to provide a safety net for youth who drop out of school before they complete a high school education, and
2) to provide post high school education for students interested in technical or vocational studies or the first two years of a baccalaureate program.

Partnerships with the university system and other four-year institutions include working to provide a smooth transition for students who attend community colleges and wish to continue to study at the upper division, as well as to secure well-prepared instructional, administrative and other professional staff.

These linkages are critical for the well-being of students. Student progress is greatly enhanced if the adults who are responsible for preparing them and helping them make the transitions cooperate in their best interests. Community colleges have taken the lead in encouraging cooperative programs with high schools under the Huskins bill and in the new "tech-prep" programs. Community colleges are also working to prepare students well for entry into university programs and to secure the cooperation of the university system in making that transition as smooth as possible.

The measures selected to indicate the success of the partnerships are:

A. Number and Percent of Recent High School Graduates Enrolled in Community College Programs

B. Number of and Enrollment in Cooperative Agreements with High Schools

C. Number and Percent of Students in the UNC System Who Attended a Community College

D. Number of and Enrollment in College Contractual Agreements for College Transfer

CONTINUUM MEASURE A: Number and Percent of Recent High School Graduates Enrolled in Community College Programs

Background

This measure is intended to show how successful community colleges are in attracting recent high school graduates into programs which will provide them with additional skills and enable them to be more productive citizens. However, because we cannot determine from the data now available the year in which any given student graduated from high school, we cannot provide meaningful data on the numbers of students who make a smooth transition from high school into community college programs.

The data we are using this year show the number of students aged 18-20 with 12 years of education (not dropouts) who enrolled in a community college. Clearly this could include graduates from several years, and does not really even approximate the most recent year's graduates. We have the same problem with this measure that we have with Access Measure D, and the same solution will apply: a data system that shows year of high school graduation for each student.

The data also show high school graduates in a given year and the number of seniors who said in a survey at the end of their senior year that they intended to go to a community college the following fall.

Implications

The data show that the percent of high school seniors expressing intent to attend a community college has steadily increased over the past five years. The community college enrollment aged 18-20 did fall slightly in 1990-91; however, the decline is likely due to the decrease in the number of high school graduates in 1990-91.

Several forces are likely to be responsible for a steady percentage increase in enrollment by 18-20 year olds and expressed intent to attend a community college by high school seniors. First, many more jobs now require education beyond high school. So, more students overall are choosing to go on for more education. It is not as easy to get a good job without more education. Secondly, the cost of baccalaureate institutions has been rising rapidly, though wages have been static. So, more students may be choosing community colleges because they are more affordable. Third, admissions standards at the University of North Carolina institutions have changed. So, more students may be finding that they must enroll in a college transfer program prior to entering a university. Finally, the community colleges may have improved their reputation as a viable and acceptable alternative in the view of counselors, peer groups, students and their families.

Data

ENROLLMENT OF RECENT HIGH SCHOOL GRADUATES AND HIGH SCHOOL SENIOR INTENT TO ENROLL IN COMMUNITY COLLEGES

YEAR	COMMUNITY COLLEGE ENROLLMENT AGED 18-20	NUMBER OF H.S. GRADUATES	# AND % OF SENIORS WITH C.C. INTENT	
			#	%
1986-87	24,356	66,045	15,719	23.8
1987-88	24,943	66,148	16,537	25.0
1988-89	27,350	69,709	19,163	27.5
1989-90	30,312	64,521	18,530	28.7
1990-91	29,745	62,533	19,352	30.9

Source: Statistical Service Section, DCC.

Frequency: Collected annually.

Scope: System and institution level data.

Contact: Steve Ijames, Director of Information Services

Source: NC Public Schools Statistical Profile.

Frequency: Annual.

Scope: Public school system and district data.

Contact: NC Department of Public Instruction.

Recommendation

Implement the student progress monitoring system providing year of high school graduation. This will be a good measure at the system level of the transition from high school to additional education. On a college by college basis, comparisons would be questionable since students in some areas have many alternatives for post-secondary study while those in other areas have few.

CONTINUUM MEASURE B: Number of and Enrollment in Cooperative Agreements with High Schools

Background

Agreements between high schools and community colleges enable students to get credit at the community college for work completed during high school instead of repeating it for a college grade. They also enable high school students to take advantage of courses which are not available at their high school. Effective articulation requires coordination of curricula, schedules and other joint initiatives by school and college personnel. These efforts often encounter barriers of historical conflicts, turf protection and simply inadequate time for the necessary work to be undertaken.

There are a number of ways schools and colleges can work together to achieve joint goals, but state level approval is required if the college sets up classes specifically for the high school students, or if there is credit given. These approved agreements are the subjects of the data.

Implications

While the number of agreements shows that there is considerable cooperation between schools and community colleges, it also reflects the fact that about half the colleges have not set up cooperative agreements or have not been able to do so. The programs do not involve large numbers of students, a fact which should reassure those who fear that the state is paying twice for students to get a high school education or who fear that community colleges are unfairly recruiting high school students. However, the relatively low enrollment may also indicate unmet needs. An increase in cooperative agreements was expected this year since tuition was no longer required. Such an increase did not occur. In fact, the number of colleges involved in cooperative agreements decreased by one and the total number of agreements decreased by four. Nonetheless, the total number of students involved in cooperative agreement programs increased in 1990-91. The barriers to increased cooperation between schools and colleges would bear further examination.

Data

NUMBER OF & ENROLLMENT IN COOPERATIVE AGREEMENTS WITH HIGH SCHOOLS

YEAR	NUMBER OF COLLEGES	NUMBER OF AGREEMENTS	NUMBER OF STUDENTS
1987-88	34	53	2,823
1988-89	28	51	3,103
1989-90	29	49	2,537
1990-91	33	64	3,478
1991-92	32	60	3,852

Source: Program Division Records, DCC.

Frequency: Monthly tabulations.

Scope: System and institutional data.

Contact: James Wingate, Vice President of Programs, DCC.

Tech Prep

The tech prep program is a relatively new cooperative venture between the community college system and the public schools. In this program students complete a prescribed course of study during high school and then matriculate into the appropriate field at the community college. The number of tech prep programs has increased dramatically over the past three years. Data are unavailable on the number of students enrolled in the tech prep programs.

NUMBER OF TECH PREP PROGRAMS

YEAR	NUMBER OF PROGRAMS
1989-90	4
1990-91	14
1991-92	60

Source: The Tech Prep Center.

Contact: Myrtle Stogner, Richmond Community College.

Recommendation

The joint use of facilities is a common practice that should be the subject of some study. The barriers to cooperation should be further examined. Data should be collected on the number of students enrolled in tech prep. programs.

CONTINUUM MEASURE C: Number and Percent of Students in the UNC System Who Attended a Community College

Background

The transfer program has been an important part of the community college mission from its beginning, even though the numbers of students involved are relatively small. This measure indicates how many students are transferring and what percentage of the UNC system's students were once community college students.

For some UNC system institutions, transfers are a significant percentage of enrollments (as at UNC-Charlotte). For others, they are a negligible number. While there are many factors involved, it is important that the university and community colleges work together to make transfer possible by insuring that curricula are complementary, that students know what they will need to transfer and that students are assisted by the receiving institution in complying with its rules.

The data understate the transfer picture since they do not include all the students who participated in contracted general education programs. (See Continuum Measure D.) These students may be recorded as native students or as transfers from another UNC system institution. The data do not include students who may have transfered to a university during the spring semester; the data only show those transfers that occured in the summer or fall semester. Finally, it is not now possible to show how the transfer rates of community college graduates compare with non-graduates.

Community colleges can serve as a way to increase the numbers of citizens who eventually go on for a college degree by providing a transition point that may be more comfortable, affordable or better suited to the needs of many students. In this way, they also can provide educational opportunities for groups such as minorities who have been underserved in the past.

Implications

Community colleges are an untapped resource for universities. They also represent a viable way that students are getting the first two years of baccalaureate education in a setting that is more affordable to themselves and to the state. The numbers of transfers are rising, in line with the resolution of the Joint Boards of Education adopted in March, 1989 which set a goal of a seven percent per year increase.

As the data below demonstrate, there was a significant increase in the number of transfers during 1991. Part of this increase is due to some students from contractual programs being recorded as transfers for the first time. In 1992 all contractual students will be reported as transfers, as will students who transfer during the spring semester. Another possible explanation for the rise in transfers in 1991 is the increase in the number of students who are pursuing the first two years of a baccalaureate education at the community college, and the number of community colleges offering the transfer program.

Data

TRANSFERS FROM COMMUNITY COLLEGES TO THE UNC SYSTEM, 1986-90

YEAR	NUMBER	PERCENT CHANGE	PERCENT OF ALL TRANSFERS
1987	2,416	3.3	32.8
1988	2,554	5.7	34.0
1989	2,868	12.3	35.7
1990	3,207	11.8	35.9
1991	4,035	26.6	40.5

Source: Statistical Abstract of Higher Education in North Carolina.

Frequency: Annual.

Scope: State, system and institutional data in selected instances.

Contact: Linda Balfour, UNC General Administration.

Recommendation

These data need to be improved. Data on graduates and non-graduates should be developed and comparisons should be made to the performance of native students. It was suggested that numbers of students who applied for transfer but were denied be reported, but the existence of quotas at some UNC institutions would have to be considered when interpreting that data. There is a comprehensive study of college transfer by the UNC system and the Department of Community Colleges now underway that should shed more light on these issues.

CONTINUUM MEASURE D: Number of and Enrollment in College Contractual Agreements for College Transfer

Background

Fourteen institutions which did not have approved college transfer programs in 1990-91 have contracted with senior colleges to provide general education programs for their students. The senior college hires the instructor, oversees the delivery of the instruction and allows the students to earn credit for the classes taken through this program. In this way, a community college which does not have enough students to offer a complete program can enable students in its service area to have access to pre-baccalaureate coursework which will be honored at the contracting college. These agreements are a good testimony to cooperative relationships between institutions.

Implications

The increasing enrollment in contracted general education programs indicates strong and growing demand for pre-baccalaureate education. Colleges with large enrollments in these programs may consider adding college transfer programs, though when the relationship works well it may continue to be the most advantageous approach.

Data

GENERAL EDUCATION CONTRACTS AND ENROLLMENT

COMMUNITY COLLEGE	SENIOR COLLEGE	1986/ 87	1987/ 88	1988/ 89	1989/ 90	1990/ 91
Alamance CC	UNC-Greensboro	0	0	169	403	682
Bladen CC	UNC-Wilmington	94	100	143	318	376
Brunswick CC	UNC-Wilmington	--	--	--	228	258
Carteret CC	ECU-Greenville	275	342	355	422	444
Central Carolina CC	Campbell Univ.	344	515	480	526	627
Haywood CC	Western Carolina	136	129	164	357	346
Johnston CC	ECS-Greenville	286	350	505	642	771
Pamlico CC	ECU-Greenville	44	46	57	63	50
Piedmont CC	UNC-Greensboro	6	2	41	92	79
Randolph CC	UNC-Greensboro	285	241	330	417	444
Roanoke-Chowan CC	ECU-Greenville	115	117	121	121	135
Sampson CC	UNC-Wilmington	145	211	367	421	482
Stanly CC	UNC-Charlotte	64	78	94	138	122
Wake CC	UNC-Greensboro	--	--	--	30	311
TOTAL (14 Community Colleges)		1,794	2,131	2,826	4,178	5,127

Source: Program Services Records, DCC.

Frequency: Tabulated annually.

Scope: All participating institutions.

Contact: Peggy Ball, Associate Director of Program Services, DCC.

Recommendation

In reporting information on college transfers in 1992, the UNC system will begin including all students who transfer from a community college with a contractual agreement as college transfer students. At that time, performance of students who transfer from college contractual programs also will be available. As a measure of cooperation between the community college system and the university system, however, the reporting of enrollment in college contractual programs should continue. Efforts should be undertaken to identify and collect performance data on students in college contractual programs. The possibility of comparing the performance of community college contractual program students with native university students should be investigated.

CRITICAL SUCCESS FACTOR IV: WORKFORCE DEVELOPMENT

Supporting North Carolina's economic development has been an important part of the mission of the community college system since its beginning. The system is a major tool for providing the state's citizens with the education and skills they need to be productive in the workforce. The system institutions have traditionally worked closely with the businesses in their areas to insure that the programs offered by the college prepare citizens to take the jobs that are available. They have also provided citizens with the skills to be self-employed.

North Carolina originated customized training programs for new industries which agreed to come into the state, and its approach has been copied widely. This program remains a strong part of the state's economic development arsenal, along with other categorically funded programs for existing industries and small business.

In addition to these specialized programs, the system's ability to stay current with the job market protects the state from skill shortages and protects its citizens from finding their skills outdated by changing technology and market forces. Measures of the success of the system in staying on the cutting edge are difficult to determine but important.

The measures which have been identified for the success of the system in its economic development role are:

A. Number of Employers and Trainees Served by: New and Expanding Industry, Focused Industrial Training, Small Business Centers, Apprenticeship Programs

B. Number of Workplace Literacy Sites and Number of Students Being Served

C. Employer Satisfaction With Graduates

D. Employment Status of Graduates

WORKFORCE DEVELOPMENT MEASURE A: Number of Employers and Trainees Served by: New and, Expanding Industry, Focused Industrial Training, Small Business Centers, Apprenticeship Programs

Background

The programs which are examined by this measure are the categorical programs created specifically to address employer needs. They are very popular, partly due to the responsive and flexible way in which they allow the colleges to respond when specialized needs are identified.

North Carolina's New and Expanding Industry training program provides the customized training which has been a major part of the state's economic development strategy, and the Focused Industrial Training Program (FIT) has added similar services for existing businesses.

Small business centers were created to train entrepreneurs and existing small business owners. It is increasingly important to support home-grown enterprise. since the feasibility of attracting businesses from out of state has declined. It is also a fact that more jobs are created by small businesses than by large ones. These very popular programs provide only a limited amount of one-on-one assistance, but instead offer workshops and seminars for their clients and provide resource and referral services.

North Carolina has not had a history of strong apprenticeship programs. The community colleges have mainly supported apprenticeship by providing related instruction in areas where enough apprentices are enrolled to form a class.

Implications

New and Expanding Industry continues to serve an increasing number of trainees and a significant number of employers in any given year. FIT is a newer program. The years which show marked increases in FIT enrollees are years in which new FIT centers were funded. Both programs continue to reach substantial numbers of employers and employees with training services. The small business center program also continues to reach a large number of people with the range of services indicated. Apprenticeship is a very small program in community colleges and it has further declined in recent years.

Data

NEW & EXPANDING INDUSTRY TRAINEES & PROJECTS, 1986-87 TO 1990-91

YEAR	TRAINEES	PROJECTS
1986-87	9,397	136
1987-88	12,263	167
1988-89	16,833	149
1989-90	16,807	165
1990-91	14,857	140

Source: Annual Report of Training Projects for New & Expanding Industries.

Frequency: Annual. Published every fall.

Scope: System and institution data.

Contact: John Wiles, Associate Director of Business and Industry Services, DCC.

FOCUSED INDUSTRIAL TRAINING TRAINEES & INDUSTRIES SERVED, 1986-87 TO 1990-91*

YEAR	TRAINEES	INDUSTRIES
1986-87	6,306	708
1987-88	5,427	646
1988-89	7,253	924
1989-90	9,653	1,031
1990-91	8,686	780

* Includes the apprenticeship program.

Source: Program Services Section Records.

Frequency: Annual.

Scope: System and institution level data.

Contact: Glynda Lawrence, Program Coordinator, DCC

SMALL BUSINESS CLIENTS SERVED, 1986-87 TO 1990-91

YEAR	# OF CENTERS	PARTICIPANTS	COUNSEL	REFERRAL	EXT./CURR COURSE PARTICIPANT
1986-87	35	27,531	4,751	3,371	4,992
1987-88	40	32,654	5,384	4,541	8,982
1988-89	50	36,161	7,389	5,508	11,704
1989-90	50	43,736	7,098	5,998	12,950
1990-91	50	43,563	9,456	6,143	10,847

Source: Small Business Progress Report

Frequency: Annual. Published every summer.

Scope: System level data.

Contact: Jean Overton, Director of Small Business Centers, DCC.

Recommendation

These data do not indicate the quality or cost effectiveness of the training being provided by the programs involved. Ways to show those elements should be developed and/or provided through regular evaluation of the programs. Emphasis should be given to the development of outcomes measures for the programs. An ongoing assessment of these programs, as well as all other programs offered by the community colleges, should be implemented.

WORKFORCE DEVELOPMENT MEASURE B: **Number of Workplace Literacy Sites and Number of Students Being Served**

Background

According to a June 26, 1990 report prepared for The Governor's Commission on Workforce Preparedness, the proportion of workforce participants in North Carolina with at least a high school diploma is only 60 percent. The large number of adults currently in the workforce without a high school diploma represents a major obstacle for the future economic development of the state. Whereas the old technology of industry could absorb those individuals lacking a high school diploma, the technology of today's industries cannot.

Workers of today must possess basic skills that are far different from those basic skills of yesterday. In addition to communication skills and basic mathematical skills, today's worker must be able to think critically, work effectively in teams, and apply problem-solving skills. The key to the future economic well being of the state is an appropriately educated workforce.

A major barrier that exists for many workers in need of literacy and basic skills training is the availability and accessibility of the training. These individuals are often under financial and other pressures that prevent them from pursuing literacy classes at the community college. In order to meet the needs of these workers, workplace literacy sites are being established across the state. A cooperative venture between the community colleges and the local industries, this program establishes basic skills classes at the industry site and tailors program content to complement workplace needs. The idea behind the program is that by making the classes more accessible, more workers will participate.

Implications

Data on the increase in the number of workplace literacy sites and on the number of students being served by these programs indicates the program's success. With the implementation of the Literacy Education Information System, data should be available in the future to determine the success of students participating in the workplace literacy site programs as compared with students in traditional basic skills programs.

Data

NUMBER OF WORKPLACE LITERACY SITES AND NUMBER OF STUDENTS BEING SERVED

YEAR	NUMBER OF SITES	STUDENTS ENROLLED
1988-89	221	5,863
1989-90	325	7,611
1990-91	341	7,506

Source: Workplace Basic Skills Sites in NC, 1990-91.

Contact: Bobby Anderson, Director of Basic Skills, DCC.

Recommendation

Data should continue to be collected on this measure. An analysis of the success of students participating in the workplace literacy program should be conducted. This analysis should not only determine the success of the students in the program, but should also examine factors related to the structure of the program at different industries and the effect those factors have on the success of the students. Further, some cost analysis on the workplace literacy program compared to other literacy programs may provide useful information.

WORKFORCE DEVELOPMENT MEASURE C: Employer Satisfaction With Graduates

Background

Employer satisfaction with community college students is a critical test of all programs. A 1991 survey of North Carolina employers conducted for the Governor's Commission on Workforce Preparedness revealed that 72.4 percent of employers are satisfied, overall, with the preparation community college students are getting. This compared with only 29 percent expressing satisfaction with public schools. While such data are encouraging, nevertheless they do not reflect the performance of specific graduates nor do they provide insight on the nature of weaknesses which are encountered.

Individual institutions in the system conduct employer surveys as part of their planning process and/or program review process, but there is no systematic coordination of the effort. Such data were collected at one time through a state sponsored survey of employers, but they are no longer collected. The survey results were generally very favorable.

The Department of Community Colleges is now working with the North Carolina Occupational Information Coordinating Committee on the development of an interagency follow-up system that would track the education and training histories, placement, employment and wages of former participants in the state's education and training programs. Such a system, similar to one that has been established in Florida and several other states, would utilize information from the unemployment insurance database maintained by the Employment Security Commission. Under this system, student records from the community colleges could be matched with the unemployment insurance records revealing which students are employed, the name and address of their employer, and their quarterly wages. The system could not reveal the position or job type of former students.

A second step would be to use the information on employers generated by the unemployment insurance database to survey employers. The survey would be designed to gather information on the position or job type of former students and on employer satisfaction.

Recommendation

Employer evaluation of programs is an essential accountability tool. The Department of Community Colleges should continue to work with the NC OICC to develop and implement the interagency follow-up system. Funds and other resources should be sought to develop and implement a state-wide employer survey.

WORKFORCE DEVELOPMENT MEASURE D: Employment Status of Graduates

Background

The most important measure of the effectiveness of programs intended to help people get and secure good jobs is the record of students of accomplishing that goal. There is much anecdotal data about the success of community college students. Often instructors who are close to their students and program heads who are close to the employers know whether their students are getting jobs. This anecdotal evidence is very strong for some programs, such as nursing, but absent or less promising for others. It is more difficult for an instructor with large classes or for program administrators when the programs have more dispersed labor markets to be as exact about the numbers of students who are placed, though they often have a good "feel" for the situation.

Nevertheless, comprehensive student follow-up is really the only way to have complete data on placement rates, and student follow-up is expensive. While a partial student follow-up was conducted each year for several years, the data included only twelve colleges each year. Thus, the data are not comparable over the state. Problems with response rates and the sample nature of the follow-up also precluded definitive results. The partial student follow-up was funded by the federal government as part of an assessment of vocational education programs. Those funds are no longer available and, as a result, the partial student follow-up will not be continued.

As discussed in Workforce Development Measure C, the Department of Community Colleges is working with the NC OICC on the development of an interagency student follow-up system that will utilize the unemployment insurance database maintained by the Employment Security Commission. This system, when fully implemented, will provide employment status information on graduates.

Recommendation

Placement data are urgently needed. Placement rates are one of the essential indicators for programs focused on the workforce. The Department of Community Colleges should continue to work with the NC OICC to develop and implement the interagency follow-up system.

CRITICAL SUCCESS FACTOR V: COMMUNITY SERVICES

Part of the mission of the comprehensive community college is to provide special services for the citizens of the community. These services take the form of providing educational opportunities which help individuals to be better citizens, parents and just better people. We have tended to let community services become defined as the classes offered, particularly in avocational or leisure-time activities. However, the real meaning of community services encompasses the role of the college in supporting leadership development in the community, offering its facilities as a meeting place, providing cultural activities and other specialized functions. It includes the activities of college personnel in supporting the civic and benevolent activities of the community. The wide range of the types of things that community services includes is evidence of the key role community colleges play in the life of individual, and very different, communities.

Community services classes have been funded through a block grant since 1987-88. Funding for community services classes shows the effect of financial pressure, so enrollments have minimum value as a performance indicator. However, the data we have available measures the number of avocational, practical skills and other courses that are offered and their enrollment. Data have also been collected on the use of campus facilities by outside groups, and data on community financial support of the colleges have been compiled.

For fiscal year 1991-92, the funds for community service and the Visiting Artist program were cut in half and combined into one block grant. The legislature and the State Board of Community Colleges maintained their position that all colleges must have a presence in community service and the cultural arts. It is too early to tell the full impact of the funding cuts, but the measures of community service for 1991-92 should be carefully monitored.

The measures of community service are:

A. Number of Courses Offered and Students Enrolled Through Community Services (Avocational, Practical Skills, Academic, Cultural/Civic)

B. Numbers of Persons from Special Populations in Avocational, Practical Skills, Academic and Recreational Courses

C. Support of Community Service Activities (Use of Facilities by Outside Groups; Support of Civic and Cultural Activities)

D. Local Government Support of Colleges

E. Non-Government Support of Colleges

COMMUNITY SERVICES MEASURE A: Number of Courses Offered and Students Enrolled Through Community Services (Avocational, Practical Skills, Academic and Recreational)

Background

The community college mission in continuing education is well established. In the North Carolina system, a distinction has been made between continuing education courses designed to enhance occupational skills and those courses which offer non-credit academic, avocational, practical skills or recreational learning activities. All courses in these categories, except for recreational classes, must be approved by the State Board before a college can offer them, since they are eligible for state funding. Occupational classes are funded by an FTE formula similar to credit (or curriculum) courses, though at a lower level. The other categories are supported by a block grant for community services, an approach which was begun in 1987-88. Recreational classes must be self-supporting. Other classes MAY be offered on a self-supporting basis, but if so, they do not earn FTE toward the college's share of the block grant. Fees collected for such classes may be used to enable the college to continue and expand its community services program. This provision enables the community services program to grow even though state funding is kept to a minimum level.

Implications

The data show that substantial numbers of North Carolinians enroll in community services courses offered by community colleges, though the numbers and the percent of the community college total enrollment declined sharply after the program changes implemented in 1987-88. That decision reflected the determination that credit programs, literacy, and occupational continuing education classes would be the priorities of the system. Recreational classes, which are self-supporting, have shown a rebound in enrollment, reflecting the growing popularity of wellness and health maintenance programs.

Data

ENROLLMENT IN COMMUNITY SERVICES COURSES
(Duplicated Across Type)

YEAR	ACADEMIC	AVOCA-TIONAL	PRAC. SKILLS	RECREA-TIONAL	TOTAL COM. SER. ENROLL	% OF SYS. ENROLL
	(166 approv. courses)	(71 approv. courses)	(47 approv. courses)	(48 approv. courses)		
1986-87	36,487	56,262	26,397	2,349	121,495	18.9
1987-88	23,317	44,924	18,927	976	88,144	14.1
1988-89	22,543	47,754	20,234	2,044	86,940*	13.1
1989-90	28,152	53,135	34,858	2,087	110,451*	14.9
1990-91	30,275	52,897	41,059	2,831	119,708*	15.9

*Unduplicated total enrollment.

Source: Annual Enrollment Report.

Frequency: Annual. Published every winter.

Scope: State and institution data.

Contact: Steve Ijames, Research and Information Services Section, DCC.

Source: Master Course List, Continuing Education.

Frequency: Annual.

Scope: System level.

Contact: Chuck Barham, Program Services Section, DCC.

Recommendation

This is a useful measure, especially as compared to system enrollments. These data should be carefully monitored to determine the impact of funding changes in community services. As was stated in the introduction of the community services factor, the block grants for community services and visiting artists were cut in half and combined into a single block grant for fiscal year 1991-92. In the future these data will be one of the indicators of the impact of this funding change.

COMMUNITY SERVICES MEASURE B: **Numbers of Persons From Special Populations in Avocational, Practical Skills, Academic and Recreational Courses**

Background

One of the purposes of community services activities is to reach citizens who have few alternatives. Senior citizens are the major group, but citizens in rest and nursing homes, prisons, mental health and alcohol rehabilitation facilities, etc. are also among those served with these classes and other activities.

Senior citizens make up a majority of those enrolled in community services classes. These citizens depend on community college activities for opportunities to fulfill learning objectives which may have been postponed, to help them cope with health, financial or other problems, and to improve their general quality of life. The state has a historic commitment to them and provides community college classes tuition-free. Community colleges contribute to making North Carolina attractive to retirees.

Data have not previously been collected on the characteristics of participants in community service activities. While such data can be readily collected from participants in classes, it is difficult and expensive to collect data from participants in other types of community service activities. The one element of data available for 1991-92 is the enrollment senior citizens, which was 44,536.

Recommendation

Data on the special populations served by the community colleges are important in demonstrating the extent to which colleges reach out to all groups. The data necessary for this measure should be systematically collected, or the measure should be dropped from the critical success factors report.

COMMUNITY SERVICES MEASURE C: **Support of Community Services (Use of Facilities by Outside Groups; Support of Civic and Cultural Activities)**

Background

The role that community colleges play goes beyond the educational mission that is normally associated with colleges. In many communities the colleges provide a focal point for community activity and cultural events. Whether it is providing a central location for community groups to meet, holding forums during political debates, or sponsoring events in the fine arts, the colleges have a major impact on the quality of life in the community.

It is not easy to measure the true impact of the colleges on the quality of life in their service area with data that are currently being collected. It is possible, however, to demonstrate the extent to which the colleges provide services to the community. Three measures have been chosen to indicate the extent to which the community colleges support community services activities.

The first measure examines the role that the community colleges play as a center of local activity. The mission of the community college system relative to community service includes providing, where needed, a central location for meetings and events of local community groups. For many communities, the college provides the facilities that make many of their functions possible.

Each college was asked to record the number of outside groups using the facilities and the number of hours the facilities were used by these groups. An outside group was defined as any group not directly associated with the college. Thus, if the local chamber of commerce or the county commissioners held a meeting at the college, such an event would be recorded.

The second measure of support of community service activities is the number and types of cultural experiences the colleges made available to the community through the visiting artist program. This program allows colleges throughout the system the opportunity to sponsor an artist on campus. The visiting artist program enriches the offerings of the college and expands the community services function.

It is difficult to measure the impact on the community of a program such as the visiting artist program. There is no way at present to determine the effect the experience of being exposed to an artist has on the people of the community or how such a program affects the community's view of the college. Instead, the impact of the program can only be measured by the number of activities that result from its implementation.

The third measure of the colleges' support of community services activities is the number of civic and cultural events the colleges sponsor or co-sponsor. These non-FTE generating activities are designed to fulfill the community service mission of the colleges. For many communities, the colleges are the center of civic and cultural events, providing enriching experiences for all members of the community.

As with the visiting artist program, it is difficult to measure the impact that the civic and cultural events sponsored by the college have on the community. Colleges have been asked to maintain a total count on the number of non-FTE generating civic and cultural events that were either sponsored or co-sponsored by the college. The data are presented below.

Implications

The data on the number of outside groups using the college facilities and the total hours of usage indicate that the colleges do provide a valuable service to the community in making the college facilities available to outside groups. While data on availability of space to respond to requests was not systematically collected, many colleges reported not being able to meet all the requests for use of the facilities due to the scheduling of classes during the day and evening.

Data

NUMBER OF OUTSIDE GROUPS USING COLLEGE FACILITIES AND TOTAL HOURS OF FACILITIES USAGE BY OUTSIDE GROUPS, 1990-91

	NUMBER OF GROUPS	HOURS OF FACILITIES USAGE
TOTAL	5,466	60,282
AVERAGE	94	1,039

Source: Planning and Research Unit, DCC.

Contact: J. Keith Brown

The data on the visiting artist program show that the program is serving a large number of people. Though no direct statements can be made about the impact the program is having on the communities, it can be surmised from the data presented that the program is fulfilling a valuable community service.

Data

VISITING ARTISTS PRESENTATIONS

YEAR	NUMBER OF VISITING ARTISTS	NUMBER OF PRESENTATIONS	NUMBER OF PEOPLE SERVED
1989-90	57	5,673	544,066
1990-91	58	5,631	476,630

AUDIENCES SERVED BY THE VISITING ARTIST PROGRAM

YEAR	PRE-SCHOOL /ELEM.	MIDDLE SCHOOL	HIGH SCHOOL	COLLEGE	ADULT	SPEC. POP.	SENIOR CITIZ.
1989-90	101,234	46,189	46,489	25,886	238,390	68,770	61,891
1990-91	118,902	36,260	44,005	24,567	158,953	21,247	35,481

NUMBER OF VISITING ARTISTS BY CATEGORY

YEAR	MUSIC (CLASSIC)	MUSIC (JAZZ)	THEATRE	VISUAL	FOLK	LITERATURE	DANCE
1989-90	30	4	11	3	5	4	0
1990-91	30	4	11	3	5	3	2

Source: Visiting Artist End-of-Year Report.

Contact: Bobby Anderson, Program Services, DCC.

Like the previous two measures, the data on the colleges' support of civic and cultural events demonstrate that they are fulfilling their community service mission. In examining the data, it must be remembered that these civic and cultural events are in addition to the events resulting from the visiting artist program and in addition to FTE generating civic and cultural events.

Data

NUMBER OF NON-FTE GENERATING CIVIC AND CULTURAL EVENTS SPONSORED OR CO-SPONSORED BY COMMUNITY COLLEGES, 1990-91

	NUMBER OF SPONSORED EVENTS	NUMBER OF CO-SPONSORED EVENTS
TOTAL	1,157	1,075
AVERAGE	20	19

Source: Planning and Research Unit, DCC.

Contact: J. Keith Brown

Recommendation

This measure needs to be examined more closely. While it is clear that college facilities are being used extensively by outside groups, it is not known what types of groups are using the facilities or how the facilities are being used. This may be the topic of a special study to determine the impacts beyond educational program offerings that community colleges have on the counties in which they are located. In addition, a study should be designed to determine the impact that the visiting artist program and the sponsoring of civic and cultural events have on the community. The data on number of events and offerings should be carefully monitored to determine the effect of the reduction of funding for the visiting artist program in 1991-92.

COMMUNITY SERVICES MEASURE D: Local Government Support of Colleges

Background

Community colleges represent a joint venture between the local community and the state. The local community, in petitioning to establish a college, must demonstrate, among other things, a need for the institution and a commitment to partially fund the college. By statute, the county in which a college is located must provide operating funds for the college. These funds are used primarily to cover the costs of utilities and the maintenance of plant, but some counties make funds available for a wide variety of other purposes including, in rare cases, salary supplements for some personnel. As might be expected, the level of local government support varies widely, usually in direct relationship with the wealth of the county.

In general, for colleges located in one county but with a service area that extends beyond the county, only the local county is obligated to provide operating funds. In many cases, however, if a college serves more than one county, the additional counties in the service area will contribute to the operating costs of the college, particularly if the college operates a campus site in those counties. In those cases where a college serves three or more counties, the college receives a special state supplement for operating costs.

Data on the level of local government support to the system as a percent of the system's total budget was collected from the annual summary of institutional budget requests.

Implications

The data show that the percent of the system's total yearly budget being provided by local government funds has very gradually increased over the past five years. The data do not allow for any analysis of the adequacy of the funds in meeting the needs of the colleges. The data do indicate an increase in local government support for 1991-92, but as a function of the percent of the total system budget, local government funding remained the same as the previous year.

Data

LOCAL GOVERNMENT SUPPORT OF COLLEGES

YEAR	LOCAL SUPPORT	% OF TOTAL COLLEGE BUDGET
1987-88	$ 49,592,680	11.4
1988-89	55,051,214	12.1
1989-90	60,466,389	12.1
1990-91	65,545,707	12.2
1991-92	68,519,851	12.2

Source: Summary of Institution Budget Request.

Contact: Finance and Administrative Support, DCC

Recommendation

This measure provides information on local support; however, it is limited information. A special study may be needed to determine the adequacy of the local government support and to develop a measure of effort being made by counties to support a college. It is likely that more effort is required on the part of a rural county to support a college than is required to support a college in a more urban, and likely more affluent, county. A special study could be used to investigate this and other questions related to local government support.

COMMUNITY SERVICES MEASURE E: Non-government Support of Colleges

Background

The majority of funds used to operate the colleges are derived from state and local government. There are, however, a number of programs, services, and activities that are funded from other sources. Though amounting to only a small portion of the yearly budget, these funds enable the colleges to undertake activities that otherwise would not take place.

In the present case, non-government support of the colleges refers to support that is not a part of the state allotment or the local government allotment. It may include government support in the form of federal grants for special purposes. Also included in this support would be donations to the college or its foundation that are used during a fiscal year. It does not include the assets of a college's foundation.

Data on the level of non-government support of the college as a percent of the college's total budget were collected from the annual summary of institutional budget requests.

Implications

The data show that the level of non-government support of the colleges as a percent of the colleges' total yearly budget increased in 1991-92. This represents the second major increase in non-government support over the past five years, the first occuring in 1990-91. Both the dollar amount of non-government support and the percent of total college budget represented by non-government support increased. It is not known at this time if the increase is due to increased federal grants being made available to the colleges, if more colleges are using foundation funds to support the college activities, or if some other source of non-government support has increased. It is interesting to note that for the first time in the past five years, the percent of total college budget accounted for by non-government support (12.5 percent) is greater than the percent of total college budget accounted for by local government support (12.2 percent).

Data

NON-GOVERNMENT SUPPORT OF COLLEGES

YEAR	NON-GOVERNMENT SUPPORT	% OF TOTAL COLLEGE BUDGET
1987-88	$ 46,132,926	10.6
1988-89	48,004,784	10.6
1989-90	50,569,733	10.1
1990-91	58,158,541	10.8
1991-92	69,930,174	12.5

Source: Summary of Institutional Budget Request.

Contact: Finance and Administrative Support, DCC

Recommendation

The data provided by the summary of institutional budget requests are very limited. If this measure is to be retained, data should be collected on the types of non-government support being provided to the college and any changes that have occurred in the types of support over the years. Further, to assess the impact of the non-government support on the colleges, an analysis of how the colleges use non-government support should be undertaken.

CRITICAL SUCCESS FACTOR VI:
PROGRAM MANAGEMENT/ACCOUNTABILITY

Educational institutions across the nation are being held accountable for their actions as never before. Federal legislation in the form of the Campus Security and Right to Know Act and Carl Perkins Act regulations have caused colleges to look more closely not just at the process of what they are doing, but also at the end product-- the outcomes of their actions. The General Assembly, in examining budget requests, is keenly interested in the return on the state's investment in the community colleges. Accrediting agencies, the chief of which is the Southern Association of Colleges and Schools (SACS), have made accountability (referred to as institutional effectiveness) a major factor in the accreditation or reaffirmation of a college.

To be accountable is to be answerable for, implying that the accountable party is responsible for a satisfactory explanation. That in turn implies that the accountable party has sufficient authority and resources to produce a satisfactory account.

Accountability for the community college system is shared by the State Board, the local boards, state and local administrative staffs and faculty. Each has responsibilities for which it is held accountable. A well-organized and managed system will provide appropriate authority and resources at each level and hold each group appropriately accountable.

The entire process of planning, program review, evaluation of results and these critical success factors themselves makes up an essential part of the comprehensive accountability system. Traditionally, accountability has been defined primarily in terms of accountability for funds, but these measures also indicate how programs are managed.

The measures chosen are:

A. Annual Educational Program Audit Summary--Number Audited and Percent of System Instructional Budget Cited for Exceptions

B. Number and Percent of Programs Reviewed

C. Number and Percent of Eligible Programs Accredited or Reaffirmed

ACCOUNTABILITY MEASURE A: Annual Educational Program Audit Summary Number Audited and Percent of System Instructional Budget Cited for Exceptions

Background

Auditors from the Department of Community Colleges (DCC) review the records of each college and determine the integrity of the accounts. Since the funds are distributed by a formula which is primarily driven by the number of full-time equivalent (FTE) students in class, and the types of classes "earn" different amounts of dollars, it is important that students be properly counted and that classes be properly designated by type. Tuition must be properly charged and collected, and classes must meet in proper settings for approved periods of time. These and certain other details are the subject of the program audits.

The data show the number of audits conducted, the percentage of audits with exceptions, the resulting financial adjustments made as a result of the audits and the percent of system instructional budget accounted for by the financial adjustments.

The available data are for audits conducted in 1986-87 through 1990-91 covering program years 1985-86 through 1989-90. During that period, the State Auditor conducted an operational audit of the DCC audit function. The number of auditors employed by the Department has increased over the years. This has resulted in increased ability to conduct more audits, to conduct more extensive audits, and to provide advice that prevents audit concerns. As recommended, the Department also changed its procedures to provide for more balance between the amount of auditors' time focused on continuing education and curriculum programs. These changes are reflected in shifts in the numbers and types of questions raised by the auditors.

Implications

The data on the number of audits are inconclusive, probably because prior to the increase in the number of auditors there was a more marked trade-off between the number of audits which could be done and the thoroughness of each audit. The sharp increase in colleges cited for exceptions found in 1988-89 is a clear reflection of the increased number of auditors. In spite of the increased number of exceptions, the percentage of exceptions has declined.

While the percentage of audits with exceptions, increased slightly in 1989-90, the total resulting financial adjustment declined dramatically. This indicates that the exceptions cited were not of a serious nature nor did they impact dramatically on the system. In 1990-91 the percentage of audits with exceptions showed a sharp decline, even though all 58 colleges were audited during the same year (four colleges were audited twice). There was an increase in the resulting financial adjustments in 1990-91, but it should again be noted that all colleges were audited in 1990-91, something that had not occurred in the past.

Data

EDUCATION PROGRAM AUDIT SUMMARY: NUMBER OF COLLEGES AUDITED, NUMBER OF EXCEPTIONS CITED, PERCENTAGE OF AUDITS WITH EXCEPTIONS

YEAR	COLLEGES AUDITED	COLLEGES CITED FOR EXCEPTIONS	% OF AUDITS WITH EXCEPTIONS	RESULTING FINANCIAL ADJUSTMENT	% OF SYSTEM INSTRUC. BUDGET
1986-87	55	38	69	$ 315,511	0.18
1987-88	32	23	71	$ 889,622	0.48
1988-89	56	36	64	$ 487,214	0.25
1989-90	52	38	73	$ 159,197	0.07
1990-91	58	32	52	$ 285,348	0.12

Source: Annual Audit Summary.

Frequency: Annual. Published every fall.

Scope: State and institution data.

Contact: Bill Cole, Auditing and Accounting Section, DCC.

Recommendation

The data on the number of audits and exceptions is useful, but a better way to indicate the seriousness of the exceptions and their satisfactory resolution needs to be developed. A way to show whether the colleges corrected problems or continued to have the same ones should be developed.

EDUCATION PROGRAM AUDIT SUMMARY:
COLLEGES CITED FOR EXCEPTIONS AND RESULTING FINANCIAL ADJUSTMENTS

INSTITUTION	FTE	RESULTING FINANCIAL ADJUSTMENT	% OF INSTRUCTIONAL BUDGET
	< 1,000		
Pamlico CC	200	0	0.0
Bladen CC	707	0	0.0
Martin CC	882	0	0.0
Roanoke-Chowan CC	935	$ 37,274	1.8
	1,000-1,999		
Brunswick CC	1,093	$ 15,434	0.7
Halifax CC	1,263	0	0.0
Carteret CC	1,304	$ 2,246	0.07
Sampson CC	1,309	0	0.0
Southwestern CC	1,355	$ 16,529	0.6
Nash CC	1,361	0	0.0
Wilson TCC	1,381	$ 19,712	0.6
College of the Albemarle	1,435	$ 12,909	0.4
Mitchell CC	1,510	$ 14,871	0.4
Haywood CC	1,558	0	0.0
Richmond CC	1,615	$ 2,248	0.08
Randolph CC	1,662	0	0.0
Edgecombe CC	1,860	0	0.0
Craven CC	1,934	0	0.0
	2,000-2,999		
Isothermal CC	2,046	$ 2,014	0.04
Caldwell CC & TI	2,119	0	0.0
Wayne CC	2,441	0	0.0
Surry CC	2,473	$ 51,597	1.0
Lenoir CC	2,503	0	0.0
Johnston CC	2,682	0	0.0
Cape Fear CC	2,822	$ 5,147	0.08
Pitt CC	2,921	0	0.0
	3,000-4,999		
Asheville-Buncombe TCC	3,082	0	0.0
Alamance CC	3,316	$ 70,689	1.1
Durham TCC	3,457	$ 2,483	0.03
	> 5,000		
Wake CC	5,348	$ 29,712	0.3
Fayetteville TCC	6,910	0	0.0
Central Piedmont CC	10,048	$ 2,483	0.01

ACCOUNTABILITY MEASURE B: Number and Percent of Programs Reviewed

Background

The State Board adopted a policy in October, 1989 requiring that each college review all its curriculum programs every five years. Models for comprehensive program reviews were developed by a consortium of five colleges and disseminated through the system. The colleges submit summaries of their reviews to the Program Services section of the Department of Community Colleges.

As the first five years of the policy go by, a larger number of reviews can be expected each year. Colleges are gaining knowledge about the review process and skills in conducting the investigations required. At the campus level, reviews are becoming increasingly valuable as sources of information about program strengths and weaknesses.

Implications

In the first three years of the five-year data review cycle, 41 colleges have submitted program reviews to DCC. Data are available on the number of programs reviewed as of March 4, 1992. Many colleges are developing their program review process and are beginning its implementation. The data show that as of March 4, 1992, 27 percent of the system's approved programs have been reviewed as compared with 11 percent having been reviewed one year ago. No data are available on the quality or outcome of the program reviews.

Data

NUMBER AND PERCENT OF PROGRAMS REVIEWED
(As of March 4, 1992)

NUMBER OF APPROVED PROGRAMS	NUMBER OF OFFERED PROGRAMS	NUMBER OF PROGRAMS REVIEWED	% OF PROGRAMS REVIEWED
1,815	1,693	459	27

Source: Curriculum Program Review Summary.

Contact: Allen McNeely, Program Services, DCC.

NUMBER AND PERCENT OF PROGRAMS REVIEW

(As of March 4, 1992)

INSTITUTION	FTE	# OFFERED	# REVIEW	% REVIEW
	< 1,000			
Pamlico CC	200	7	0	0
Montgomery CC	661	16	3	19
Bladen CC	707	15	3	20
Tri-County CC	721	14	8	57
Anson CC	743	25	3	12
McDowell TCC	876	24	0	0
Martin CC	882	16	0	0
Roanoke-Chowan CC	935	19	1	5
	1,000-1,999			
James Sprunt CC	1,061	22	9	41
Brunswick CC	1,093	14	0	0
Mayland CC	1,196	22	11	50
Halifax CC	1,263	25	9	36
Piedmont CC	1,294	25	3	12
Carteret CC	1,304	24	0	0
Sampson CC	1,309	12	5	42
Southwestern CC	1,355	35	4	11
Nash CC	1,361	28	2	7
Wilson CC	1,381	30	15	50
College of the Albemarle	1,435	23	19	83
Southeastern CC	1,497	19	0	0
Cleveland CC	1,509	26	0	0
Mitchell CC	1,510	16	0	0
Beaufort Co. CC	1,543	20	8	40
Haywood CC	1,558	29	0	0
Stanly CC	1,588	34	11	32
Blue Ridge CC	1,597	27	24	89
Richmond CC	1,615	18	13	72
Randolph CC	1,662	22	16	73
Rockingham CC	1,790	24	3	13
Edgecombe CC	1,860	26	2	8
Craven CC	1,934	32	10	31
Robeson CC	1,963	24	9	38
	2,000-2,999			
Isothermal CC	2,046	29	0	0
Caldwell CC	2,119	30	7	23
Vance-Granville CC	2,133	35	16	46
Davidson CC	2,255	25	3	12
Wayne CC	2,441	38	0	0
Wilkes CC	2,463	25	8	32
Surry CC	2,473	27	0	0
Western Piedmont CC	2,500	40	38	95
Lenoir CC	2,503	43	2	5
Rowan-Cabarrus CC	2,669	26	0	0
Johnston CC	2,682	33	0	0
Cape Fear CC	2,822	29	1	3
Sandhills CC	2,875	29	11	38
Pitt CC	2,921	52	6	12
	3,000-3,999			
Catawba Valley CC	3,005	38	5	13
Gaston CC	3,011	35	0	0
Asheville-Buncombe TCC	3,082	35	0	0
Coastal Carolina CC	3,253	33	31	94
Alamance CC	3,316	39	16	41
Durham CC	3,457	32	0	0
Central Carolina CC	3,553	35	13	37
Forsyth CC	4,187	36	12	33
	> 5,000			
Wake CC	5,348	53	10	19
Guilford CC	6,122	54	49	91
Fayetteville CC	6,910	57	21	37
Central Piedmont CC	10,048	72	19	26

Recommendation

As a system level indicator, this measure will have little applicability beyond the first five years, since the number of reviews should even out and be comparable from year to year. Additional data on the quality of the program reviews or on the outcomes of program reviews would strengthen this measure.

ACCOUNTABILITY MEASURE C: Number and Percent of Eligible Programs Accredited or Reaffirmed

Background

In addition to approval by the State Board of Community Colleges, many curriculum programs are eligible for accreditation by outside agencies. For some programs, such as the Associate Degree Nursing program, accreditation by an outside agency is required by DCC order for the program to be offered. A number of programs, however, do not have mandatory accreditation requirements. Colleges can choose whether or not to accredit these programs.

There are a number of reasons why a college would want to accredit a program that does not carry mandatory accreditation by DCC. In several cases, for a graduate to be a candidate for licensure or certification the program must be accredited by the agency issuing the license or certificate. In other cases, accreditation may raise the status of the program since it documents adherence to a given set of state or national standards. Finally, accreditation can be thought of as a program management tool, like program review, for it provides standards by which to judge the curriculum.

There are also reasons not to seek accreditation. The accreditation process can be costly, with some accreditations costing several thousand dollars. In addition, the college may not have the faculty or staff resources necessary to carry out the accreditation process; there is a time cost involved. Finally, the requirements for accreditation may be beyond the resources of the college. For example, there may be equipment or library requirements that the college simply cannot meet.

Implications

There are 28 different programs being offered by community colleges that do not have a mandatory accreditation but do allow for accreditation. This translates into 254 programs offered by at least one college, 23 percent of which are accredited. This number does not include the programs which have an accreditation requirement but are also eligible for secondary accreditations which are voluntary (for example, a nursing program must be accredited by the NC Board of Nursing but can also be accredited by the National League of Nursing if a school wishes to acquire a secondary accreditation).

The data are the result of a report that was developed by Program Services in August, 1989 and therefore may not be completely accurate. The number of program offerings may have changed, new programs eligible for accreditation may have been approved, or more colleges may have had their programs accredited or may not have renewed their accreditation. Nevertheless, the data are a good indicator of the number of programs with voluntary accreditation.

Data

VOLUNTARY ACCREDITATION OF CURRICULUMS

NAME	NUMBER OF OFFERINGS	NUMBER ACCREDITED	% ACCREDITED
Dental Laboratory Technology	1	1	100
Emergency Medical Science	7	1	14
Medical Assisting (T-058)	8	7	88
Medical Assisting (V-031)	6	3	50
Surgical Technology	9	0	0
Architectural Technology	11	2	18
Chemical Engin. Technology	1	1	100
Civil Engin. Technology	7	3	43
Computer Engin. Technology	11	0	0
Electrical Engin. Technology	6	2	33
Electromechanical Technology	7	0	0
Electronics Engin. Technology	43	8	19
Industrial Engin. Technology	7	2	29
Instrumentation Technology	2	0	0
Manufacturing Engin. Technology	9	2	22
Mechanical Draft. & Design Tech.	20	2	10
Mechanical Engin. Technology	9	3	33
Surveying Technology	5	0	0
Correctional Services	4	0	0
Criminal Justice	34	1	3
Juvenile Justice	1	0	0
Law Enforcement Technology	11	11	100
Automotive Service Technology	5	3	60
Automotive Technology	3	3	100
Forest Management Technology	2	2	100
Funeral Service Education	1	1	100
Horticulture Technology	12	0	0
Paralegal Technology	12	1	8
TOTAL	254	59	23

Source: Curriculums Where Licensure and/or Certification May Be Appropriate (August, 1989).

Contact: Roger Worthington, Program Services, DCC.

Recommendation

Efforts should be made to update the Program Services report on accreditation status of curriculum programs now being offered by the community colleges. In addition, an analysis of the costs and benefits of undergoing voluntary accreditation of curriculum programs should be conducted.

Published April 1992
North Carolina Department of Community Colleges
500 copies were printed at a cost of $334.15 or $0.67 per copy
Robert W. Scott, President, N.C. Community College System

AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER

ERIC Clearinghouse for
Junior Colleges